

Original Correspondence.

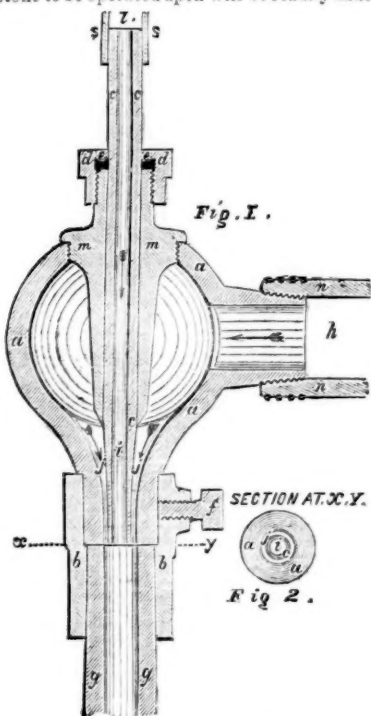
VENTILATING MINES.—According to the invention of Messrs. W. ASTON and F. TATCHELL, of the Alexandra Foundry, Leeds, a diaphragm is introduced into the centre or eye of the fan to separate the currents of air, and the two faces of the diaphragm are curved in such manner as to guide or direct the currents, and cause them to flow in a direction corresponding with the place of action of the fan; a cowl is provided at the outlet from the fan.

instalment in advance, has no other resource than to avail himself of the Post Office Savings Bank, and it is suggested that in consequence of the inconvenience of this they pay their daily fare, although incurring loss, and considerable personal inconvenience. The Season Ticket Bank secures itself against loss by not issuing any tickets until the instalments paid by the depositor are equal to the amount payable to the railway company, and the shareholders in the Bank derive their profit from a charge of 7½ to 15 per cent. made to the depositor for the trouble of receiving the deposits and obtaining the ticket. In addition to this there would be the discount which it is hinted would be allowed by the railway companies, and it has been often stated that in the case of Cook's, and similar tourists' agencies, this averages 10 per cent., so that the anticipated profits would be enormous. The promoters of the scheme have the greatest confidence, that if certain arrangements still pending between the Season Ticket Bank and the different railway companies be brought to a favourable issue, unprecedented advantage will be offered to the public.

THE SAND-BLAST PROCESS OF CUTTING STONE.

The rapidity and perfection of the sand-blast process in its application to the ornamentation of glass was referred to in the Journal of May 31, in noticing the Conversation of the President of the Institution of Civil Engineers, and we have since taken the opportunity of ascertaining its efficiency in cutting stone. The principle upon which the process is based is a particularly interesting one. The impingement of sand upon a surface has long been known to produce an abrading effect, to some extent similar to that which results from rubbing the sand upon such surface; but until Mr. Tilghman turned his attention to the subject no advantage whatever was taken of the knowledge. He, however, noticed that the different speed with which different substances were acted upon when scrubbed with sand was a circumstance which was not to be neglected. Pursuing his experiments, he found that many hard substances were more rapidly abraded than softer ones, and that when the material possessed elasticity the effect of the sand upon it was comparatively trifling. In operating upon glass the fact of India-rubber, wax, paper, or similar soft and elastic materials escaping abrasion is availed of to reproduce the most elaborate and delicate designs even far more cheaply than the very plainest can be produced by the usual method. As has already been mentioned, the efficacy of the blast depends upon its velocity. The sand may be propelled either by steam, water, or air, but steam is in general preferred where high velocities are required. When a large quantity of material is to be removed, as in the ornamenting of stone, a steam jet of from 60 to 80 lbs. pressure is used. In this case the stencil is made of iron or rubber; but when a small quantity of material is to be worn away, or the surface merely depolished, as in ornamenting glass, a jet of air of from 1 to 1½ lb. is preferred. With a low pressure, soft and delicate substances, such as paper designs, lace, leaves, &c., cemented on glass, may be used. With a steam jet using two-horse power of steam at 70 lbs. pressure, and one pint of sand, two cubic inches of granite, four cubic inches of marble, or ten cubic inches of sandstone, may be cut away per minute. It will be obvious that flat or curved surfaces may be alike acted on by this process, the blast being in all cases directed to the surface to be acted upon at right angles.

The importance of the process of cutting stone is still more apparent, not that the amount of labour saved is greater, but because, a larger amount of material being removed by the blast, the effect is more easily seen. In cutting stone the steam and sand issues from a chilled cast-iron tube, 7-16ths of an inch inside diameter. This chilled cast-iron tube is the only part of the apparatus which is worn away. It lasts from two to three days, and is easily replaced. The jet is held about 10 inches above the stone, and, by a mechanical movement, is moved regularly over all parts of the stone. The jet uses one pint of sand per minute. The manner in which the sand is carried to the face of the stone to be operated upon will be readily understood from



the above diagram, in which *aa* is the body of the steam jet; *cc*, sand-tube, inside diameter 3-16ths of an inch; *gg*, chilled cast-iron tube, chilled inside and outside, inside diameter 7-16ths of an inch, and 6 in. long, held in position by the coupling, *bb*. The chilled tube and sand tube are of iron, the other parts of brass. The steam is conducted from the boiler by a flexible hose (India-rubber), *nn*, entering the steam jet at *h*, and then passing down through the annular opening, *jj* (Fig. 2) into the chilled tube. The steam, in rushing down the tube, *gg*, carries with it at the same velocity (1500 or 1600 feet per second) the sand descending through the tube, *ii*, to which it is supplied through a flexible tube attached to a hopper.

When we examined the machine it was working upon veined marble for mantels, and turning out some elaborately traced designs, cut to the depth of about a quarter of an inch at a very rapid rate. The work is done at the speed of about 1 ft. superficial in from 20 to 25 minutes, and it is estimated that with manual labour nearly as many hours would be necessary, so that the difference in economy will be at once appreciated. When the slab has passed under the blast it would require but a few minutes' hand-labour to make it ready for use. The veins being, of course, somewhat harder than the body of the marble are not quite so deeply cut, and it is this simple finishing alone which would have to be done. The cast-iron pattern, although acted upon by the sand, can be used very many times over before it requires to be changed; and, as there is little difficulty in taking a dozen similar casts when the pattern is once made the production of patterns would certainly be no objection to the general adoption of the process. The durability of India-rubber under the sand-blast is remarkable; a stencil of that material, 1-16th of an inch thick, has been known to withstand the action of the sand without apparent wear while 200 times its own thickness of marble was cut away. In the application of the sand-blast to quarrying purposes, it is proposed to use two jets working at slightly different angles, and it is found that by this means a perfectly square groove can be obtained, and the block of stone or slate can be got out so perfect that it is virtually ready for market. The process will, doubtless, come largely into use for a variety of purposes.

MOTIVE-POWER.—The invention of Mr. HOEVELMANN, of Barmen, Prussia, relates to the employment of the gaseous products arising from the combustion of fuel combined with steam, as a means of obtaining motive power. In carrying out the invention the fuel used in heating the water to generate the steam

is burned in a chamber or chambers within the boiler, combustion being sustained by the aid of compressed air first supplied with the water to the boiler, and then the air and the water separate, the air passing to the fuel and the water by another conduit to the upper part of the boiler. The gas generated by the consumption of the fuel is forced through the water, and mixed with the steam produced therefrom, is used as a motive power.

THE SAMBRE AND MEUSE RAILWAY.

"Facts and Suggestions for the Holders of Ordinary Shares of the Sambre and Meuse Railway, on the great and rising value of their property." Published by Editham Wilson, Royal Exchange.

The injudicious indifference with which Belgian Railway Securities were for a long time looked at by British investors generally was exemplified by the fact that the Sambre and Meuse ordinary shares, which, in addition to a guaranteed income yielding a minimum dividend, possess the valuable right of participating up to 20 per cent. on the net profits of the Great Central of Belgium System, beyond a certain fixed amount, were quoted at a price below what would have been justified by the minimum dividend alone. The author of this pamphlet shows, both from his own investigations and the declared opinions of many experienced judges, that the participating right is likely to prove more important than the guarantee. Corroborated by the authorities alluded to, he believes that in combination with the dividend, it will secure the shareholder a very handsome dividend. As to the permanence of such dividend there can scarcely be two opinions. The mineral, manufacturing, and agricultural productions of Belgium, and the energetic industry of her teeming population, permit no doubt that it would be not only a permanent but an increasing one for a length of time.

Taking these facts into view the author submits to his fellow-shareholders that the price of these ordinary shares, though higher than it was some time since, has not by several degrees reached its proper and destined platform. The wisest thing possible, he says, is for those to buy who can, the most foolish is for those who hold to sell at present figures. He quotes other authorities in support of his view that the shares ought to command par at least, and that the probability is that they will go above it when the consummation of the negotiations for State purchase is imminent. But why, it may be asked, should this approaching event influence quotations? Because it is represented, and not without substantial reason, that the antecedents of the Belgian Government are so fair and honourable as to create a well-founded confidence that it will pay the fair value for what is purchased; and if there be cases in which claims for what are called "consequential profits" possess peculiar validity, the Sambre and Meuse ordinary shares are beyond all doubt amongst them, as, in the absence of State interference, the return from them may be doubled or trebled before very long. For one conclusion the author makes out a strong case—that these shares are amongst the best and safest investments that can be made.

MINING NOTABILIA.

[EXTRACTS FROM OUR MINING CORRESPONDENCE.]

EAST BOSCAWELL.—This mine raised, dressed, and sold during the last fortnight sufficient tin to meet the previous month's working cost.—Tin sold June 7, 3 tons 11 cwt. 3 qrs. 11 lbs., at 78s. 2s. 6d. per ton, 311½ lbs. 1d.; and 3 cwt. 3 qrs. 15 lbs. at 68s. 5s. per ton, 136 lbs. 11d.—325s. 6s., to Messrs. R. R. Mitchell and Co.

ROSEWARNE UNITED.—The 61-inch cylinder pumping-engine, just erected under the superintendence of Messrs. John Hocking and Son, engineers, Redruth, was successfully and most satisfactorily set to work on Saturday, and in a very short time the water was pumped to surface, which was hailed with loud cheers by a large number of visitors and others assembled for the purpose of witnessing the start. The ceremony of christening the engine was performed by Mr. Watson (the secretary's son), whose name it bears. The short period of 10 weeks only have elapsed since the buildings were commenced, and the work has been pushed forward with a degree of spirit that reflects great credit on all concerned. The workmen employed afterwards dined together, and the visitors also, under the presidency of Mr. John Hocking, jun., and the liberal spread provided had ample justice done to the completed re-working of the group of mines in the Gwineard district—New Rosewarne, North Rosewarne, and Rosewarne United—which has been brought under the auspices of Mr. John Watson, London.

TREGGOS COMMON (Tin).—A splendid discovery has been made within the last few days in the large elvan course which traverses the set intersecting the capel lodes. The mine is held by a private party, situate at the head of the far-famed Goss Moors, and between Wheel Mary and Wheel Treggog Mines, and adjacent to the St. Austell and Roche Mines. In a short time this property is expected to prove a great success.

FORTESCUE (Tin).—The fortunate shareholders may be congratulated on the continued and increasing success of their mine. The anticipations of the most practical authorities concur in the view that in a comparatively short time it will prove no less a prize than its fortunate neighbours, which have given dividends of some millions sterling. Some of the shareholders visited the mine this week, where, we learn, well pleased with the proceedings, which are said to give general satisfaction.

NORTH TRELEIGH WOOD (WHEAT PLANTY).—This mine continues to improve, and from present indications further discoveries are expected to be made in a few days. Good progress is being made with the first sampling of ore.

NEW SILVER RAKE.—The operations at the mine continue to go on with the most satisfactory results; and as soon as the engine is erected for drawing the stuff to the surface the returns will, it is expected, be more than doubled and large dividends declared. The nominal capital of the company is only 15,000, divided into shares of 5s. each; and we understand that the whole has been subscribed privately, a great proportion being taken by those resident in the district, who are well acquainted with the merits of the property. The mine seems destined to be a rival to its rich neighbour, Prince Patrick, and to conclusively prove the Tarkyn Mountain to be one of the richest lead-bearing districts in the Kingdom.

ROSEWALL HILL AND RANSOM.—At the meeting, on June 11, the accounts showed a debit balance of 981½ 4s. 10d. A call of 2s. 6d. per share was made. Capt. W. Buechle and J. White say—"We have now employed underground in this mine 103 men—67 on the work and 36 on tribute, at an average tribute of 13s. 1d. at the present price of tin. We very deeply regret that our returns for the last quarter will not meet our expenditure, which is unusually heavy, owing to the large outlay for repairs underground—this, with the additional 16 heads of stamps and the new pulverisers, have in labour and materials increased the cost at least 240%. The present prospects of the mine lead us to believe that during the ensuing quarter we shall somewhat increase our returns, and we are hoping that the costs will be considerably less."

WEST CONDURROW.—At the adjourned general meeting, held at St. Michael's House, on Tuesday (Mr. William Paynter in the chair), it was resolved that the meeting be further adjourned to July 1, to enable Messrs. Brazington and Langford to complete their arrangement for the re-organisation of the company.

IRON METALLURGY.—We have received a few copies of the well-known treatise "On Iron Metallurgy," by the late Mr. S. BALDWIN ROGERS, long considered to be entirely out of print. The copies are clean and uncut, and complete, with steel-plates, &c. They are offered at the original publication price of 25s. per copy, and will be forwarded by post from the Mining Journal office on receipt of 25s. 6d. For the information of those unacquainted with the work it may be stated that the subjects treated of are—Iron and its properties, and the mode of giving it nature and body respectively; the materials required in ironmaking; the mode of dealing with the sulphur in the fuel; the peculiarities of Great Britain and Ireland, and their value in iron smelting; fluxes; the blast furnace cinders; smelting; the action and reaction of materials in the blast furnace; the produce of blast furnaces; analyses of pig iron; the refining process; the puddling process; steel, and its manufacture, &c., and a general recapitulation of the several matters referred to. There is, likewise, an outline of a new system of management for conducting the various operations at large ironworks scientifically and economically, with a statement of the advantages to be anticipated from carrying out the suggested new system. The book was always considered of great value, as giving the opinions of a thoroughly practical man of long and varied experience.

ALLOYS containing platinum appear to be singularly unchangeable. M. Helon, of Paris, has secured several patents for its use. Nickel alloys and German silver, with from 1 to 20 grains of platinum, are said to be secured from corrosion and oxidation, and aluminium bronze is rendered of a permanently brilliant colour by the admixture of a small quantity of this precious metal.

Mr. R. F. Fairlie, C.E., and Mr. J. Beattie have joined the board of the Swedish Iron Rolling Stock and Implement Works (Limited).

MESSRS. WATSON BROTHERS return their most sincere thanks for the great patronage bestowed and confidence reposed in their firm for the last 30 years, and to assure their friends and clients it will be their earnest endeavour to merit a continuance of both.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring the success in the aggregate," and Messrs. WATSON BROTHERS have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and shareholding than there is at present; and, from the lengthened experience of Messrs. WATSON BROTHERS, they are emboldened to offer, thus publicly, their best services to all connected with the mining interest.

Messrs. WATSON BROTHERS are daily asked their opinion of particular mines, as well as to recommend mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Although the present depression in English mines (owing in a great measure to the enormous losses incurred by the public in American gold schemes) is very great, perhaps there never was a time when some of them had better prospects of success, or when investors could with greater safety embark in a judicious selection. It was with this feeling that one of our firm, after going to Shropshire and Wales, visited Cornwall. Some of his Notes appeared, under the signature of "Argus," in last week's Journal, and we are now prepared with a selected list of mines, which may, we think, be safely recommended.

ZENNOR CONSOLS TIN MINING.

Consisting of 1200 shares of £5 each. Fully paid-up.

This company is formed for the purpose of purchasing and working the tin mine, and which has been most favourably reported upon, situate on the coast to the west of St. Ives; admitting levels on the course of several mineralised lodes to a depth of 100 yards, without the aid of pumping machinery. The development will prove rapid, economical, and successful, in the opinion of all practical authorities.

Fully 850 shares are already subscribed for, and early applications on the jointed form is requested, accompanied by a deposit of £1 per share, to be in full, unless the list be filled up by Monday, the 23rd June next.

FORM OF APPLICATION.

To Messrs. TREDINICK and Co., Financial Agents, 32, Fleet-street, London. GENTLEMEN,—Having forwarded to you the sum of £1 of £1 per share on shares in the Zennor Consols Tin Mine, I beg to say that I am, for that number, and to accept the assignment of the same or any less number may be allotted to me, to subscribe to the rules and conditions upon which the company is constituted, and to pay to you the further sum of £4 a share on receipt of the letter of allotment.

Name in full Description Date June, 1873. Address

Established Twenty-six Years, Fifteen at present address.

MR. THOMAS SPARGO. Consulting, Mining, and Engineering, Stock and Share Dealer, Author of "Statistics of Tin Mines of Cornwall and Devon," "Mining Atlas," "Lead Mines of Wales," "The Cornish and Devonian," &c., &c., offers his services in the selection of all Mining and Railway Stocks and Shares. He would impress on capitalists the importance of obtaining correct data previous to embarking, as it frequently too late to retreat when engagements are entered into before advice is sought. Practical authorities may guard against disasters, when applied to in time, but not be expected to counteract the effects of indiscreet operations, when already incurred.

Mr. SPARGO is a General Dealer in Stocks and Shares, and can now transact business in Government Securities, paying purchasers 5 to 10 per cent. annually commission, either for cash settlement on account days or deferred periods, to such terms as may be arranged.

Railways, Ordinary Stocks and Shares, Preference Stocks and Shares, Debentures and Bonds, bought and sold either for cash or settlement on account days, deferred periods, as shall be arranged.

Shares bought and sold in Joint Stock Banks for cash only. Colonial Bonds, Debentures, and other Securities dealt in either for cash or settlement on account days.

Foreign Government Bonds and Stocks dealt in at close market prices, for cash or account.

Miscellaneous Shares, Stocks, and Securities dealt in for cash or account, advances made on all marketable stocks and shares.

British and foreign marketable mines dealt in, and a few miscellaneous mining shares now on sale at prices which will secure intending purchasers 10 to 15, and in some instances 20 per cent. interest per annum, with strong ability of increased value.

Money collected, calls paid, and every description of finance business transacted. Coupons and sound commercial bills purchased or discounted.

224 and 225, Gresham-house, London, E.C.

MR. SPARGO, from his long experience and extensive connection, is well acquainted with every description of investment, the fluctuations in its value, and its risks. He is able to afford confidential advice and assistance to persons desiring of obtaining good security and interest for their capital. Consulting Engineer, 32, FLEET STREET, LONDON.

LEAD MINES.—Any Agent having a good MINING PROPERTY FOR SALE in SHROPSHIRE or YORKSHIRE, with productive paying quantities, WILL FIND A BUYER upon application to—

MESSRS. HARRISON AND CO., 32, FLEET STREET, LONDON.

TIN MINING IN CORNWALL.

TO PROMOTERS OF PUBLIC COMPANIES.

A SELECTION OF TWENTY TIN MINING SETTS, of first-class value, is placed in the hands of the undersigned FOR SALE, or the PROMOTION OF COMPANIES TO WORK THEM.

Confidential communications to be addressed to—

TREDINICK, Consulting Mining Engineer, 32, Fleet-street, London.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
June 17	Esgair-hir	35	£16 0 0	Sheldon, Bask & Co.
— ditto	—	11	12 6	Walker, Parier & Co.
19	Roman Gravel	50	16 8 6	Adam Egan.
— ditto	—	50	16 15 0	Panther Lead Co.
— ditto	—	50	16 10 0	—
— ditto	—	50	16 7 6	Sheldon, Bask & Co.
— Bwadrain Consols	30	14 10 0	Walker, Parier & Co.	
— Frank Mills	20	15 4 6	Burry Port Co.	
— ditto	60	12 13 6	—	
— ditto	5½	4 0 0	Nevill, Drue & Co.	
— ditto	5½	4 0 0	Sheldon, Bask & Co.	

BLACK TIN.

Date.	Mines.	Tons.	Price per ton.	Amount.
June 12	Pedra-an-drea	6 19 3 26	£78 5 0	£547 13 10
18	Great Wheel Vor	25 2 4	—	1996 18 4
— Wheel Coal	2 15 2 8	83 0 0	—	239 12 10

TIN ORE SOLD IN LONDON, 17th JUNE, 1873.

Qnty.	Price.	Purchasers.	Qnty.	Price.	Purchasers.
135	75 19 0	Tamar Smelting Co.	45	12 5 0	Boltho and Sons
57	74 10 0	—	11	12 6	Walker, Parier & Co.
22	81 0 0	—	15	68 5 0	—
80	81 5 0	—	90	79 0 0	Redruth Smelting Co.
102	78 10 0	—	28	78 0 0	Tregoning and Co.
67	80 0 0	—	75	29 10 0	—
83	75 0 0	—	140	79 15 0	—
141	49 12 6	Danbuz and Co.	—	—	—
51	33 15 0	—	—	—	—
21	57 0 0	—	60	78 0 0	—
14	18 0 0	Pennell Smelting Co.	—	—	—
78	48 2 6	Williams, Harvey, & Co.	—	—	—
59	35 15 0	—	53	23 15 0	R. R. Mitchell and Co.
120	79 10 0	Charlestown Smelt. Co.	60	33 15 0	—
40	21 0 0	—	—	—	—

EACH COMPANY'S PURCHASE.

Company.	Tons.	Price.	Company.	Tons.	Price.
Danbuz and Co.	11	8	Pennell Smelting Company	1	15
Boltho and Sons	1	15	Charlestown Smelting Company	1	15
Williams, Harvey, and Co.	7	15	Calenick Smelting Company	1	15
Tregoning and Co.	8	13	Tamar Smelting Company	1	15
R. R. Mitchell and Co.	5	13	—	—	—
Redruth Smelting Company	4	10	—	—	—

TIN ORE SOLD IN LIVERPOOL, 18th JUNE, 1873.

Qnty.	Price.	Purchasers.	Qnty.	Price.	Purchasers.
11	62 15 0	Boltho and Sons	11	62 12 6	Tamar Smelting Co.
5½	64 5 0	—	3	70 2 6	—
8	59 0 0	—	11	57 7 6	R. R. Mitchell and Co.

EACH COMPANY'S PURCHASE.

Company.	Tons.	Price.	Company.	Tons.	Price.
Boltho and Sons	18	10	R. R. Mitchell and Co.	1	15
Tamar Smelting Company	14	0	—	—	—

COPPER ORES.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
South Caradon	85	£12 0	Glasgow Caradon	50	—
— ditto	75	4 1 0	— ditto	50	—
— ditto	50	7 10 6	Bedford United	42	—
— ditto	55	9 18 0	— ditto	30	—
— ditto	54	7 12 0	— ditto	60	—
— ditto	45	3 10 6	Prince of Wales	55	—
— ditto	37	10 15 6	— ditto	50	—
Phoenix	65	2 19 0	Cradock Moor	43	—
— ditto	45	7 0 0	— ditto	43	—
— ditto	41	6 7 0	—	—	—

TOTAL PRODUCE.

Company.	Tons.	Price.	Company.	Tons.	Price.
South Caradon	412	£2626 12 0	Bedford United	130	—
Phoenix	154	808 10 0	Prince of Wales	115	—
Glasgow Caradon	186	554 10 0	Cradock Moor	83	—

Average standard £ 91 7 0 | Average produce £ 19 4 0
Quantity of ore 1040 | Quantity of fine copper £170 12 0

Amount of money £ 96 12 0 | Average production £ 170 12 0
Standard of corresponding sale last month, & 97 8 0—Production, 95s.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Company.	Tons.	Price.	Company.	Tons.	Price.
Vivian and Sons	224	£ 719 2 6	—	—	—
Nevill, Drue, and Co.	162	—	—	—	—

BRITISH MINES.

COMPRESSING MATERIALS.—Messrs. HEATH and EVANS, of Cardiff, have obtained a patent for adapting mechanical presses having a fixed length of stroke to the purpose of pressing equally materials which may vary in quantity or density, and requiring therefore the pressure upon them to be exerted through variable distances. For this purpose he attaches to a suitable mechanical press, worked by a crank, eccentric, or other convenient means, a liquid cushion or buffer, so arranged that when the pressure upon the liquid in the cushion or buffer exceeds that which may be required the liquid raises a weighted valve and escapes into a waste tank, or if preferred it may lift a weighted piston or plunger.

plan verified; also the statements of the old miners of the size, strength, and richness of our lodes in valuable ores. But these qualifications demand great perfection in the dressing and classifying of our ores in order to obtain fair value for each, requiring care and time, and a considerable further outlay. Having thousands of tons in sight to work upon, all speculation or uncertainty as to speedy and highly satisfactory results is removed. We feel sure that the ample means provided by the company's prospects to do justice to this splendid mine, and thereby to the shareholders, will willingly be supplied. The price of blende being at this moment extra low again, and quite out of proportion to the value of spelter, which commands from 27½ to 28½ per ton, while blende of 50 per cent. of zinc has recently been paid for at the rate of about 10 per cent., it would be well to stock this ore until better terms can be obtained, it not being reasonable to expect smelters to purchase during an exceptionally low metal market unless at greatly reduced prices.

BURRA-BURRA.—J. Brown, T. Jenkins, June 11: Tanner's engine shaft is cleared to the bottom, which is 3¼ fms. below the 40; the lode in this shaft is 6 ft. wide, composed principally of spar, mundie, and flookan, with spots of copper

of lead when the junction of the veins takes place. To my mind full of lead. In the driving at Bottom's sump we have really a nice end; the ground is hard, but produces some pretty stones of lead ore, and we have now a few kilibbles of very fair stuff ready to come to surface. The lead ground in the forebreast is now fully 4 ft. in height, and about 12 in. wide, mixed all through with spar, clay of a greyish colour, and lead ore, and holds out every guarantee of becoming a valuable piece of ground in a few feet more driving.—Parry's Shaft: I cannot speak in too high terms of every point at work here. We are getting ore, by driving and by cross-cutting, lumps 10 and 12 lbs. solid, improving as we open out. Ventilation is now satisfactory.

EAST BALLESWIDDEN.—Thomas Trahair, June 18: The mine is in forked 4 fathoms under the 30, and we hope to see the 43 next week, when I shall be in a position to report more fully on the value of the lode. We find the ground all worked east and west of the shaft as deep as the mine is forked. We have cleared

shall commence cutting down the pitwork, &c., with vigour. We have commenced driving the 80 yard level, and the character of the lode is everything that can be expected. We anticipate something good to transpire in this level & can lead ore obtained.—**New Shaft:** We have continued clearing north towards the Vron lode. The character of the ground is similar to what was remarked last week. On surface the engine and everything connected is working satisfactorily.

WEST CARADON.—**N. Richards, T. Pryor, June 18:** The lode in the shaft sinking below the 71 is large, and producing stones of ore, but not sufficient to sink; the lode is of the upper part of the lode, and is driving east of cross-course, the stope in the bottom of the 60 will produce 2½ tons per fathom. We are now driving east on a lode intersected in the 55 cross-cut north, which will yield 1 ton per fathom, and indications good for further improvement. Two stopes in the back of this level, west of cross-course, will yield 1½ and 2 tons per fathom respectively. The lode in the 42, east of shaft, will produce ½ ton per fathom. Two stopes in the back of this level will produce 2½ tons per fathom. The lode in the 30, east of shaft, will yield ½ ton per fathom. A stope in the back of this level will yield 2½ tons per fathom.

WEST LEE.—**R. Harvey, June 19:** Eastern Mine: We commenced to-day to put in solar in bottom of Hamilton's shaft preparatory to cutting through the lode. There is no alteration in the 10 east—lode still looking well. The winze in the bottom of the 10 west is in regular course of working.—**Western Mine:** We are obliged to stop the wheel in this mine for a few days to place the necessary connections to the new wheel for pumping, consequently the water is up to the 10 ft. level. I hope, however, to have it complete, and the new wheel working by the end of the week. We are getting on with the erecting of the other machinery as well as the engine.

WEST GOGINAN.—**John Kitto, June 17:** We have a full pair of men in the engine-shaft, and the sinking of the same is being proceeded with all possible force; the ground is hard to sink through, and the progress made is not so great as I could wish, but all is being done that can be. The character of the lode has improved during the past month, and I have no doubt will continue to do so as we get deeper, and we are doing all in our power to hasten the sinking as much as possible. The deep adit level driving east we have intersected a cross branch, which, for the present, is of little value, but I think it will yield 1 ton per fathom, expecting every day that it will again resume its former character, and, in all probability, it will become more productive than it has hitherto been, as we must now be getting very near the caunter lode, where I anticipate a good improvement. In the same level driving west there is no change to notice; the lode at present is not very large, and I intend cross-cutting soon in order to ascertain whether or not a part has gone off in the north side, and which, I think, is very probable. Every day we are getting on with the work.

WEST GREAT CONSOLS.—**R. G. H. Vial, June 18:** Setting Report: On Saturday last we set the following bargains:—The 50 fm. level cross-cut, to drive north of Account-house shaft, by four men, at 12¢ per fathom. The 50, to drive west of Plantation shaft, by four men, for the month, at 6¢ per fathom; this level is at present being driven by the side of the lode, which allows of better progress being made. The 40, to drive east of Kelly Hole shaft, by two men, at 6¢ per fm.; the lode is just as it has been for some time past, producing occasional good stones of tin and some of our Carpenter's work is progressing very favourably. We have connected the position of the horse main, and the lode is now driving on a shaft about 14 fms. below surface, and our carpenters are busily engaged in putting on the roof of the engine-house, which will shortly be completed. The engineers are preparing for the heaving in of the 50-in. cylinder engine with all possible vigour. Our pay and setting went off well.

WEST GWENAP CONSOLS.—**J. Nancarrow, June 18:** The ground in the new engine-shaft is favourable for sinking, and first-rate progress is being made; we are ready down to about 5 fathoms, and we commence putting in timber to-morrow. The lode is of the same character as the lode in the 40, and is working very encouraging. There has been no lode taken down in the west end since the setting. Other work goes on as usual.

WEST JEWELL.—**Joseph Michell, June 19:** The 57 driving west of Greene's engine-shaft, judging from the character of the lode and strata an improvement of value will soon take place. A stope in back of the above-named level is worth 18¢ per fathom. A stope in bottom of the 42, west of engine-shaft, is worth 18¢ per fathom. A stope in back of the 42, west of Hodge's cross-course, is worth 15¢ per fathom. The lode is of the same character as the lode in the 40, and is working very encouraging. There has been no lode taken down in the west end since the setting. Other work goes on as usual.

WEST MILWRE.—**Francis, June 18:** The No. 2 shaft on the adit level is progressing favourably, and is now being timbered and properly secured as it is cleared up. The necessary repairs are being made to the West Meadow shaft, 10 yards of which will be completed by next Saturday. When this work is done we shall put divisions to separate the drawing from the ladder-way, and afterwards commence driving the 100 ft. level, getting on with the work for the new shaft.

WEST TOLGUS.—**June 18:** Good progress is being made in the 125 cross-cut, south from Taylor's shaft; we calculate on cutting the lode before the meeting, to be held on the 26th inst. In cutting out the lode in the side of the 115, east of shaft, it is without alteration. There is no perceptible alteration in the stopes in the back of the 115. There has been nothing done in the 105 west, on the south part of the lode, since last week; the men are now stripping down the horse between the north part and the south splice; we shall open out a good piece of it (5 or 6 ft. of shaft) and the lode is a pretty lode, and will yield fully 1 ton of ore per fathom. There is no alteration in any of the other ends west from Taylor's shaft. At Richard's shaft the shaftmen are cutting down the shaft below the 55, which is at present very hard and spare for driving. The lode in the 55 east is 4 feet wide, yielding 2 tons of ore per fm. The lode in the same level west is large, but not yielding so much ore as it was, now about ¾ ton per fm. The lode west from the rise or winze below the 40 is still yielding 3 tons of ore per fm. There is no lode yet cut in the 40 cross-cut, north-west of shaft. We are glad to say the engines are working well, and the men are getting on with the work for the new winch as fast as possible. We have cleared up the stuff at Richard's shaft.

WEST WHEEL GORLAND.—**J. Mayne, June 19:** South Lode: The lode in the stope in the bottom of the 42 fm. level, east of shaft, is worth 30¢ per fathom. The stope in the bottom of this level west is worth 15¢ per fathom. The winze sinking in the bottom of this level west is worth 10¢ per fathom. The stode in the back of this level is worth 12¢ per fathom. The 32 fm. level, driving west, is worth 7¢ per fathom; the 32 fm. level, driving east, is worth 8¢ per fathom; the 32 fm. level, driving south, is worth 6¢ per fathom. The lode in the back of this level is worth 6¢ per fathom. The lode in the west, and the men are now engaged securing the same and stull; as soon as this is done every exertion will be used to get under where the old workers had a rich bunch of tin above them, when we shall be in a position to report fully on the lode, which we are of the opinion will be found valuable.

WEST WHEEL LUCY.—**W. Harris, June 18:** Watson's shaft is being sunk as fast as possible with the present force. The lode is full 8 ft. wide, yielding rich ore, and is of the same character as the lode in the 40, and is working very encouraging. There has been no lode taken down in the west end since the setting. Other work goes on as usual.

WHEEL ARGUS.—**T. Trahair, June 19:** The engine was put to work on Saturday, and we shall begin at once to fork the mine and cut the shaft down. The men in the Beacon adit level have cleared 4 fathoms. The men in the adit level, on the Elisha lode, have cleared and timbered 3 fathoms last week. The adit end driving east from Collier's shaft is looking better for tin, and the ground not so hard for driving. In the back of the adit level, we have five tribute pitches working by 10 men. No change in the other parts of the mine.

WHEEL BASSET AND GRILLS.—**Wm. Oats, P. Prisk, June 18:** Since the adventurers' meeting there is no change of importance to notice in the engine-shaft or the 35 fm. level east and west of same. The same remark applies to the winze sinking below the 25 fm. level, which will in a short time be communicated with the 35, being sunk by a full pair of six men. The 25 fm. level east is suspended for a short time, the men put to sink in the back of the 15 fm. level against new shaft; this is being pushed on with all possible speed to effect a communication with the 35, and the lode is of the same character as the lode in the 40, and is working very encouraging. There has been no lode taken down in the west end since the setting. Other work goes on as usual.

WHEEL BEACON.—**June 18:** The engine was put to work on Saturday, and we shall begin at once to fork the mine and cut the shaft down. The men in the Beacon adit level have cleared 4 fathoms. The men in the adit level, on the Elisha lode, have cleared and timbered 3 fathoms last week. The adit end driving east from Collier's shaft is looking better for tin, and the ground not so hard for driving. In the back of the adit level, we have five tribute pitches working by 10 men. No change in the other parts of the mine.

WHEEL BASSET AND GRILLS.—**Wm. Oats, P. Prisk, June 18:** Since the adventurers' meeting there is no change of importance to notice in the engine-shaft or the 35 fm. level east and west of same. The same remark applies to the winze sinking below the 25 fm. level, which will in a short time be communicated with the 35, being sunk by a full pair of six men. The 25 fm. level east is suspended for a short time, the men put to sink in the back of the 15 fm. level against new shaft; this is being pushed on with all possible speed to effect a communication with the 35, and the lode is of the same character as the lode in the 40, and is working very encouraging. There has been no lode taken down in the west end since the setting. Other work goes on as usual.

WHEEL BEACON.—**June 18:** The engine was put to work on Saturday, and we shall begin at once to fork the mine and cut the shaft down. The men in the Beacon adit level have cleared 4 fathoms. The men in the adit level, on the Elisha lode, have cleared and timbered 3 fathoms last week. The adit end driving east from Collier's shaft is looking better for tin, and the ground not so hard for driving. In the back of the adit level, we have five tribute pitches working by 10 men. No change in the other parts of the mine.

WHEEL BASSET AND GRILLS.—**Wm. Oats, P. Prisk, June 18:** Since the adventurers' meeting there is no change of importance to notice in the engine-shaft or the 35 fm. level east and west of same. The same remark applies to the winze sinking below the 25 fm. level, which will in a short time be communicated with the 35, being sunk by a full pair of six men. The 25 fm. level east is suspended for a short time, the men put to sink in the back of the 15 fm. level against new shaft; this is being pushed on with all possible speed to effect a communication with the 35, and the lode is of the same character as the lode in the 40, and is working very encouraging. There has been no lode taken down in the west end since the setting. Other work goes on as usual.

WHEEL BEACON.—**June 18:** The engine was put to work on Saturday, and we shall begin at once to fork the mine and cut the shaft down. The men in the Beacon adit level have cleared 4 fathoms. The men in the adit level, on the Elisha lode, have cleared and timbered 3 fathoms last week. The adit end driving east from Collier's shaft is looking better for tin, and the ground not so hard for driving. In the back of the adit level, we have five tribute pitches working by 10 men. No change in the other parts of the mine.

WHEEL BASSET AND GRILLS.—**Wm. Oats, P. Prisk, June 18:** Since the adventurers' meeting there is no change of importance to notice in the engine-shaft or the 35 fm. level east and west of same. The same remark applies to the winze sinking below the 25 fm. level, which will in a short time be communicated with the 35, being sunk by a full pair of six men. The 25 fm. level east is suspended for a short time, the men put to sink in the back of the 15 fm. level against new shaft; this is being pushed on with all possible speed to effect a communication with the 35, and the lode is of the same character as the lode in the 40, and is working very encouraging. There has been no lode taken down in the west end since the setting. Other work goes on as usual.

WHEEL BEACON.—**June 18:** The engine was put to work on Saturday, and we shall begin at once to fork the mine and cut the shaft down. The men in the Beacon adit level have cleared 4 fathoms. The men in the adit level, on the Elisha lode, have cleared and timbered 3 fathoms last week. The adit end driving east from Collier's shaft is looking better for tin, and the ground not so hard for driving. In the back of the adit level, we have five tribute pitches working by 10 men. No change in the other parts of the mine.

WHEEL BASSET AND GRILLS.—**Wm. Oats, P. Prisk, June 18:** Since the adventurers' meeting there is no change of importance to notice in the engine-shaft or the 35 fm. level east and west of same. The same remark applies to the winze sinking below the 25 fm. level, which will in a short time be communicated with the 35, being sunk by a full pair of six men. The 25 fm. level east is suspended for a short time, the men put to sink in the back of the 15 fm. level against new shaft; this is being pushed on with all possible speed to effect a communication with the 35, and the lode is of the same character as the lode in the 40, and is

out: At the 150 driving east the lode is 3 ft. wide, yielding $\frac{1}{2}$ ton of copper ore to a fathom. In the back of this level the lode is $\frac{3}{4}$ ft. wide, yielding $\frac{1}{2}$ ton of copper ore to a fathom.

WHEEL GRENVILLE.—E. Hosking, W. Bennett, June 14: We are making good progress in sinking the new shaft below the 140, and hope to be down to the 150 next Saturday. The lode in the 140, east of cross cut, is worth $\frac{1}{2}$ ton per fathom. The lode in the 130, east of north shaft, is 2 ft. wide, and worth $\frac{1}{2}$ ton per fathom. The lode in the 120, east of north shaft, is 2 ft. wide, and worth $\frac{1}{2}$ ton per fathom. The lode in the 110, east of north shaft, is 2 ft. wide, and worth $\frac{1}{2}$ ton per fathom. The lode in the 100, east of north shaft, is 2 ft. wide, and worth $\frac{1}{2}$ ton per fathom. The lode in the 90, east of north shaft, is 2 ft. wide, and worth $\frac{1}{2}$ ton per fathom. The lode in the 80, east of north shaft, is 2 ft. wide, and worth $\frac{1}{2}$ ton per fathom. The lode in the 70, east of north shaft, is 2 ft. wide, and worth $\frac{1}{2}$ ton per fathom. The lode in the 60, east of north shaft, is 2 ft. wide, and worth $\frac{1}{2}$ ton per fathom. The lode in the 50, east of north shaft, is 2 ft. wide, and worth $\frac{1}{2}$ ton per fathom. The lode in the 40, east of north shaft, is 2 ft. wide, and worth $\frac{1}{2}$ ton per fathom. The lode in the 30, east of north shaft, is 2 ft. wide, and worth $\frac{1}{2}$ ton per fathom. The lode in the 20, east of north shaft, is 2 ft. wide, and worth $\frac{1}{2}$ ton per fathom. The lode in the 10, east of north shaft, is 2 ft. wide, and worth $\frac{1}{2}$ ton per fathom. The lode in the 0, east of north shaft, is 2 ft. wide, and worth $\frac{1}{2}$ ton per fathom.

WHEEL KITT. (St. Agnes).—S. Davey, J. Williams, June 14: New Shaft, Pryor's Lode. The lode or branch in this shaft, sinking below the 130, is worth for tin 12 $\frac{1}{2}$ per fathom. In the 130, driving west of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 118, driving west of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 115, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 110, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 105, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 100, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 95, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 90, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 85, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 80, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 75, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 70, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 65, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 60, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 55, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 50, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 45, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 40, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 35, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 30, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 25, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 20, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 15, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 10, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 5, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom. In the 0, driving east of shaft, the lode is worth for tin 12 $\frac{1}{2}$ per fathom.

WHEEL MARY.—Thos. Parkyn, June 19: We have intersected another lode in the cross-cut adit containing splendid rich work for tin. This adit and the other lode are side or parallel lodes with the great north lode, and by measuring the distance we have driven and the depth the adit will intersect it, I find we have 6 ft. more to intersect it. We are pushing on the driving of the cross-cut as fast as possible, and hope by next week to cut into the lode. The east lode recently discovered we have cut through, and find it 10 ft. wide. We are now driving by its side west, and shall take down some of the lode by next week, when I will report to you its value.—Middle Lode: We cannot do any more here for water. You will remember this lode is in the engine-shaft, and we are now about to send the lift into the shaft. The stamps passes and the dressing floors are nearly ready, and as soon as the work and shaft are sent from the foundry we shall at once connect the rods from the engine with the shaft. I am expecting the crank, &c., daily.

WHEEL ROBERTS.—John Goldworthy, June 19: Wilson's Engine-Shaft: We have cut down and completed it as deep as the water will admit us to go. We have about 7 ft. of water in the bottom. We are busily engaged in clearing up an old shaft to the north of Wilson's. Judging from the workings and other indications we have a favourable opinion of meeting with a good lode on reaching the bottom of the old workings.

WHEEL RUBY.—J. Richards, June 19: The ground appears changeable and disordered in the adit level, going west on the main lode, as if very near the cross lode; in 2 or 3 fathoms more it may prove something more or less, and I am looking for a most important change the west side of it, on the main lode.

WHEEL TREGOSS.—Thomas Parkyn, June 19: The shaftmen are making good progress in sinking the engine-shaft, and the ground is favourable for progress. We are driving the south cross-cut, and also driving east on the north lode. The engine is working well, and all things going on favourably.

WHEEL UNY.—W. Rich, M. Rogers, S. Coale, June 19: We have put in new fly-wheel shaft and connections at the stamps, which are now working satisfactorily. The 150, east of engine-shaft, is worth 15 $\frac{1}{2}$ per fathom. The 140, east is worth 12 $\frac{1}{2}$ per fathom. The 130, level cross-cut south continues very hard. The 120, east is worth 12 $\frac{1}{2}$ per fathom. The 110, east is worth 5 $\frac{1}{2}$ per fathom. The 100, east is worth 7 $\frac{1}{2}$ per fathom. The 90, east is worth 10 $\frac{1}{2}$ per fathom. The 80, east carries a little tin. The 70, east is worth 10 $\frac{1}{2}$ per fathom. The 60, east is worth 10 $\frac{1}{2}$ per fathom. The 50, east is worth 10 $\frac{1}{2}$ per fathom. The 40, east is worth 10 $\frac{1}{2}$ per fathom. The 30, east is worth 10 $\frac{1}{2}$ per fathom. The 20, east is worth 10 $\frac{1}{2}$ per fathom. The 10, east is worth 10 $\frac{1}{2}$ per fathom. The 0, east is worth 10 $\frac{1}{2}$ per fathom.

WILLOUGHBY.—H. Nottingham, June 17: We have commenced driving out east from the bottom of Pryor's shaft, and also cutting lode on the west side of the shaft, from which we shall extend the cross-cut to reach the new lode as soon as possible. We are now drawing the stuff from the bottom with the wheel, though we have not yet divided the shaft to the bottom. This will be done as soon as the men are under cover in the bottom; thus we shall avoid hindering the drivings. The winze sinking below the 13 ft. level, on Goddard's lode, continues to look well, and is worth 1 $\frac{1}{2}$ ton of lead and 1 $\frac{1}{2}$ ton of blende per fathom, and ground favourable for progress. The stope in the back of this level is worth 15 cwt. of lead and 1 ton of blende per fathom. The stope in the back of the 13 ft. level, south-west of Pryor's shaft, on the new lode, is without change, being of the same soft, sparry nature, mixed throughout with lead, worth about 15 cwt. per fathom. The stope in the back of this level is of the same value for lead, and producing 1 ton of blende per fathom. There being no new feature in the level driving south-west from north end, on Goddard's lode, I am going to bring these four men to the winze sinking on new lode, that we may be able to go down with all speed to meet the bottom driving. Dressing and all surface work going on in regular course. Weather still very dry.

WOOD CLIFF AND POLGOOTH.—J. Mufford, June 19: In clearing the level, east of engine-shaft at Longbottom's, we have discovered a piece of lode 1 ft. 6 in. wide, that will yield 20 lbs. of tin per ton of lode stuff; this piece of lode is standing by the side of the ancient workings, and was evidently not rich enough to be worked at that date. It appears their mode of working was by shafts about 10 fms. apart, and not by levels, as at the present day. In driving west of engine-shaft the lode is without change since last report.

TANKERVILLE.—Capt. Waters reports this week that the 140 fm. level west continues to improve, and he expects that in 2 or 3 fms. further driving the great deposit seen in the upper levels will be met with holding down.

PRINCE PATRICK.—We have inspected the specimens of lead at Mr. Bartlett's office, Great St. Helens: in value and character they are fully equal to what was indicated last week. The discovery would appear to be exciting a considerable amount of interest, not only among the shareholders but also in the neighbourhood of the mine. In addition to 25 tons of lead sold on Thursday, 3 tons of round ore have been shipped to Liverpool, at 18 $\frac{1}{2}$ per ton. This return must be taken as the limit of monthly production, for as soon as the shaft has been sunk ventilation will be secured, when it is computed from 50 to 60 tons can be raised monthly, and at a cost leaving a margin for satisfactory profits to be made. The lead generally is found in solid blocks, weighing from 50 lbs. up to 3 or 4 cwt., and requires the most simple and inexpensive dressing.

EAST BOSCAWELL.—The pay and setting passed off satisfactorily. Mr. Odling attended, who took the tin bill and cheque for balance. The accounts for last two months stands thus—Tin sold May 10, 369 $\frac{1}{2}$ 5s. 3d.; tin sold June 7, 325 $\frac{1}{2}$ 5s. 3d.; 10s. 3d.

VAN CONSOLS.—The reports from the mine continue to be most satisfactory. The stopes are now being worked on, and the dressing of ore for the market is in full operation. Considerable reaction has taken place in the price of the shares in the last few days. The general meeting is called for Thursday, July 3, on the mines, when the shareholders will have the opportunity of personally inspecting the property.

WHEEL MARY (St. Dennis).—The accounts from this mine leave nothing to be desired. The great north lode is stated to be "quite sufficient alone to pay all cost of the mine and very large profits." There are already several hundred tons of lode stuff raised from this great north lode now lying at surface ready for the stamps, and in addition to this valuable lode there are many other lodes equally as rich. Within the last month a new lode has been discovered east, from which large rocks full of tin have been raised. These rocks weighed 5, 6, and 7 cwt. each. The mine is reported never to have looked better, and, altogether, the shareholders must be congratulated upon possessing a property of exceptional promise and of undoubted value.

THE VAN RAILWAY.—A certificate of the Board of Trade, under the Railways Construction Facilities Act, 1864, having been obtained by the directors, and become binding, an extraordinary general meeting of the company will (in accordance with No. 93 of the Articles of Association) be held on Thursday.

UTAH SILVER-LEAD.—We hear from various sources that the discovery lately made at the mines is of vast importance, the ore bearing a marketable quantity of gold besides a better percentage of silver.

MR. NICHOLAS ENNOR.—We regret to learn that Mr. N. Ennor has met with a serious accident. It appears that he was returning from the inspection of a mineral property in Devon accompanied by two friends, when the horse fell, and turned the trap over a hedge, throwing the occupants out. Mr. Ennor, who was pitched on his face, strained his shoulder, had his face cut, and both his eyes discoloured; his friends were not so much injured.

WATSON BROTHERS, 1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON, E.C.

SATURDAY.—Market more active for shares in tin mines at advanced prices. Carn Brea, 115 to 120; Tincroft, 51 to 52; East Lovell, 16 $\frac{1}{2}$ to 17 $\frac{1}{2}$; Cook's Kitchen, 18 to 19; New Rosewarne, 2 $\frac{1}{2}$ to 3; Crebor, 5 $\frac{1}{2}$ to 5 $\frac{3}{4}$; West Tankerville, 3 $\frac{1}{2}$ to 3 $\frac{3}{4}$; Old Treburtuff (pref. shares), 12s. 6d. to 17s. 6d.; Tankerville, 10 $\frac{1}{2}$ to 11; Roman Gravel, 20 to 21; South Roman Gravel, 3s. to 3s. 6d.; East Van, 4 $\frac{1}{2}$ to 4 $\frac{3}{4}$; Emma, 4 $\frac{1}{2}$ to 5; Flagstaff, 12 $\frac{1}{2}$ to 13; Sweetland Creek, 4 to 4 $\frac{1}{2}$.

MONDAY.—Active demand for Carn Brea, Dolcoath, Tincroft, West Seton, West Tolgus, Wheel Seton, West Chiverton, Great Laxey, and South Carn Brea, at a further advance. Carn Brea, 117 $\frac{1}{2}$ to 122 $\frac{1}{2}$; Dolcoath, 57 to 59; Tincroft, 52 to 55; West Seton, 50 to 55; West Tolgus, 32 $\frac{1}{2}$ to 35; Seton, 47 $\frac{1}{2}$ to 52 $\frac{1}{2}$; West Chiverton, 11 $\frac{1}{2}$ to 12; Great Laxey, 16 $\frac{1}{2}$ to 17; South Carn Brea, 4 to 4 $\frac{1}{2}$; East Van, 4 $\frac{1}{2}$ to 4 $\frac{3}{4}$; Van Consols, 5 $\frac{1}{2}$ to 5 $\frac{3}{4}$; Crebor, 5 to 5 $\frac{1}{2}$; Grenville, 4 to 4 $\frac{1}{2}$; Old Treburtuff (pref. shares), 12s. 6d. to 17s. 6d.; Eberhardt, 6 to 6 $\frac{1}{2}$; Few Quebrada, 4 $\frac{1}{2}$ to 4 $\frac{3}{4}$.

TUESDAY.—Market again active, and the following shares chiefly dealt in. Carn Brea, 120 to 125; Dolcoath, 57 $\frac{1}{2}$ to 60; Tincroft, 52 $\frac{1}{2}$ to 55; Roman Gravel, 20 to 21; West Seton, 50 to 55; Van Consols, 5 $\frac{1}{2}$ to 5 $\frac{3}{4}$; West Tolgus, 32 $\frac{1}{2}$ to 35; West Basset, 6 to 6 $\frac{1}{2}$; East Lovell, 16 $\frac{1}{2}$ to 17 $\frac{1}{2}$; 12 $\frac{1}{2}$ to 13; Great Vor, 5 $\frac{1}{2}$ to 6; West Tankerville, 3 $\frac{1}{2}$ to 3 $\frac{3}{4}$; Crebor, 5 $\frac{1}{2}$ to 5 $\frac{3}{4}$; New Rosewarne, 2 $\frac{1}{2}$ to 3; Pennerley, 2 $\frac{1}{2}$ to 3; Emma, 4 $\frac{1}{2}$ to 5; Eberhardt, 6 to 6 $\frac{1}{2}$.

WEDNESDAY.—A rise of 3d. in the tin standard has caused a further advance in dividend-paying tin mines. Dolcoath, 59 to 61; Carn Brea, 122 $\frac{1}{2}$ to 127 $\frac{1}{2}$; Cook's Kitchen, 20 to 21; East Lovell, 16 $\frac{1}{2}$ to 17 $\frac{1}{2}$; Tincroft, 53 to 55; West Basset, 10 to 11; Great Laxey, 16 $\frac{1}{2}$ to 17; East Van, 4 $\frac{1}{2}$ to 4 $\frac{3}{4}$; South Roman Gravel, 3s. to 3s. 6d.; Tankerville, 10 $\frac{1}{2}$ to 11 $\frac{1}{2}$; Van Consols, 5 $\frac{1}{2}$ to 5 $\frac{3}{4}$; Crebor, 5 $\frac{1}{2}$ to 5 $\frac{3}{4}$; Grenville, 4 to 4 $\frac{1}{2}$; Old Treburtuff (pref. shares), 12s. to 17s. 6d.; New Rosewarne, 2 $\frac{1}{2}$ to 3; South Carn Brea, 4 to 4 $\frac{1}{2}$; Prince of Wales, 8s. to 10s.; Roman Gravel, 20 to 21.

THURSDAY.—Market moderately active. Van Consols, Grenville, Tankerville, and West Basset firmer. Van Consols, 5 $\frac{1}{2}$ to 5 $\frac{3}{4}$; Grenville, 4 $\frac{1}{2}$ to 5; Tankerville, 11 to 11 $\frac{1}{2}$; West Basset, 11 to 11 $\frac{1}{2}$; Great Laxey, 16 $\frac{1}{2}$ to 17; Dolcoath, 58 to 60; Carn Brea, 122 $\frac{1}{2}$ to 127 $\frac{1}{2}$; Great Vor, 5 $\frac{1}{2}$ to 6; South Roman Gravel, 3s. to 3s. 6d.; Tincroft, 52 $\frac{1}{2}$ to 55; West Seton, 50 to 55; West Chiverton, 11 $\frac{1}{2}$ to 12; New Rosewarne, 2 $\frac{1}{2}$ to 3; Crebor, 5 $\frac{1}{2}$ to 5 $\frac{3}{4}$; West Tankerville, 3 $\frac{1}{2}$ to 3 $\frac{3}{4}$; Flagstaff, 12 $\frac{1}{2}$ to 13 $\frac{1}{2}$; Emma, 4 $\frac{1}{2}$ to 5.

FRIDAY.—The demand for dividend stock continues very scarce. Carn Brea, 125 to 130; Dolcoath, 58 to 61; Tincroft, 54 to 56; East Lovell, 16 $\frac{1}{2}$ to 17 $\frac{1}{2}$; Cook's Kitchen, 18 to 19; East Lovell, 16 to 17; 12 $\frac{1}{2}$ to 13; Great Vor, 5 $\frac{1}{2}$ to 6; West Tankerville, 3 $\frac{1}{2}$ to 3 $\frac{3}{4}$; Tankerville, 11 $\frac{1}{2}$ to 11 $\frac{3}{4}$; Eberhardt, 6 $\frac{1}{2}$ to 6 $\frac{3}{4}$; Emma, 4 $\frac{3}{4}$ to 5.

With this week's Journal an enlarged SUPPLEMENTAL SHEET is given, which contains: Prize Essay on Practical Mining—North of England Iron Trade, No. VI.—Coal Mining in Scotland—Committee on Coal—Foreign Mining and Metallurgy—Foreign Mine Reports—Rocks and Geographical Mining (J. H. Collins)—Meetings of the Snowdrift, North American, Kapunda, Llay Hall Coal, Iron, and Fire-brick, Little Dean Woodside Colliery, South Condurrow, Great Wheel Vor, and Mellanear Mining Companies, &c.—Original Correspondence: Mining Profits; Hermon Prizes; Windmill for Mines; New Motor; Cretaceous Fuel; Lead Mining and Lead Dressing; Tin Mining, and Tin Dressing (N. Ennor); Lead Mining in Wales (N. Ennor); Tharsis Copper and Sulphur Mine, Spain (N. Ennor); Future of Cornish Mining (R. Trevellick); Nant-y-Rieket Copper and Lead Mining Company; Market Mines—"Circular Mining" (H. Crofts); Drake Walls Mine (C. F. Collier); Tarras Tin Mine (M. Rickard); Progressive Mines of Cardiganshire; East Boscawell Tin Mine (F. Warwick); Wheel Barnard (T. J. Barnard); Fortescue Tin Mine; Perkins Beach Mine; Lincroft Lead Mine; Mr. R. Symons, and "Japhet" Tarras Mine; Emma Silver Mine, &c.

The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, JUNE 20, 1873.

COPPER.				IRON.			
Best selected.	p. ton	s. d.	0-4 0-4	Best Welsh, in London	12	s. d.	0-3 0-3
Tough cake and tile.	90	0-12	0-0	Do., to arrive	12	0-13	0-0
Sheathing & sheets.	95	0-102	0-0	Nail rods	13	6-13	15 0
Rolls	100	0-102	0-0	Staffs, in London	14	0-15	0-0
Bottoms	100	0-103	0-0	Do., ditto	14	0-15	10 0
Old	84	0-0	0-0	Hoops, ditto	15	0-17	0-0
Burra Burra	89	0-0	0-0	Bars, at works	13	0-15	0-0
Wire	per lb.	0 1 1 $\frac{1}{2}$	0-0	Hoops, ditto	14	0-16	0-0
Tubes	0 1 0 $\frac{1}{2}$	0-1 1	0-0	Sheets, single, & plates	17	0-13	0-0
BRASS.				Pig No. 1, in Wales	5	10	0-7 0-0
Sheets	104	10-10 $\frac{1}{2}$	0-0	Refined metal, ditto	10	0-8	0-0
Wire	10 $\frac{1}{2}$	10-10 $\frac{1}{2}$	0-0	Bars, common, ditto	12	0-12	15 0
Tubes	11 $\frac{1}{2}$	11-11 $\frac{1}{2}$	0-0	Do., mach. Tynes Tees	15	0-13	0-0
Yellow metal sheathing	94	9-9 $\frac{1}{2}$	0-0	Do., railway, in Wales	11	0-13	0-0
Sheets	8 $\frac{1}{2}$	8-8 $\frac{1}{2}$	0-0	Do., Sweden, in London	15	0-19	0-0
SPELTHER.				To arrive	20	0-21	0-0
Foreign on the spot.	27	0-28	0-0	Pig No. 1, in Clyde	5	12	6-7 0-0
Do., to arrive	—	—	—	Do., f.o.b. Tynes Tees	4	10	0-5 10-0
ZINC.				Do., f.o.b. do.	—	—	—
In sheets	33	0-33	10 0	Railway chairs	5	5	0-6 0-0
QUICKSILVER (p. bot.)	14	0-0	—	Do., spikes	12	10	0-14 0-0
TIN.				Indian Charcoal, Pigs,	—	—	—
English blocks	£136	0-138	0-0	In London, p. ton	10	0-12	0-0
Do., bars (in bris.)	137	0-139	0-0	STEEL.			
Do., refined	140	0-0	—	Swed., in kegs (rolled)	—	—	—
Banca	137	0-138	0-0	Ditto (hammered)	20	0-22	0-0
Straits	136	0-137	0-0	Ditto, in faggots	—	—	—
TIN-PLATES.				English, spring	23	0-25	0-0
IX Charcoal, 1st quality	£2	2-0	2-5 0-0	LEAD.			
IX Do., 1st quality	2	8-0	2-11 0-0	English Pig, com.	23	15	0-0
IX Do., 2d quality	1	13-0	2-2 0-0	Ditto, L.B.	23	15	0-24 0-0
IX Do., 3d quality	2	3-0	2-8 0-0	Ditto, W.B.	24	10	0-0
IX Coke	1	14-0	1-18 0-0	Ditto, sheet	25	0-25	5 0-0
IX Canada plates, p. ton	24	10-26	0-0	Ditto, red lead	25	15	0-26 0-0
Ditto, at works	24	0-25	0-0	Ditto, white	30	0-32	0-0
Do., at works	24	0-25	0-0	Ditto, patent shot	28	15	0-27 5-0
Do., at works	24	0-25	0-0	Spanish	23	5	0-23 10-0

* At the works, 1s. to 1s. 6d. per box less. † Add 6s. for each X.

REMARKS.—The amount of business doing is still very limited, though with regard to tin not only has a satisfactory advance been established, but there is a general feeling that something like recent prices will be attained, and that miners will again receive 98 $\frac{1}{2}$ to 100 $\frac{1}{2}$ per ton for their black tin. Other metals are in scarcely so satisfactory a position.

COPPER.—The prices are decidedly lower, and purchases can be readily made at our quotations; indeed, buyers will only supply themselves from hand to mouth, owing to the very prevalent feeling that prices will go much lower. But, on the other hand, holders do not force sales, in the hope that the depression is but temporary, although it is certainly not an encouraging feature for holders that at Truro, on Thursday, the standard for ore paid to the miners was 2 $\frac{1}{2}$ 10s. lower.

IRON.—The tendency is downward, but the fall in Scotch pig—4s. per ton—on Wednesday has been almost recovered since. There is but little demand for manufactured qualities, and holders have had to make some concession. In Glasgow the principal reduction has been in No. 1, which is now quoted 110s. for g.m.b. The shipments were:—

Week ending June 15, 1873	Tons	21,530
Week ending June 14, 1873	Tons	13,127
Decrease		8,403
Total decrease since Dec. 25, 1872		128,174

The decline in pig-iron is equal to 10s. per ton since last week, and stocks are not increasing.

LEAD.—The demand has slightly fallen off, but prices have not materially changed.

SPELTHER.—This metal has still been sold at 26 $\frac{1}{2}$ for English, and the same price has been accepted for Silesian, but it would be difficult to place large orders under 27 $\frac{1}{2}$.

TIN.—The prices of tin are firmer; and as the improvement does not yet compensate for the advances which the smelters have been paying for the ore last brought, a further increase of prices may be anticipated.

TIN-PLATES.—Holders are less disposed to press sales, but no increase of price has been established.

QUICKSILVER.—There is nothing doing except in second-hand parcels; none can be purchased under 14 $\frac{1}{2}$ per bottle.

COPPER.—(J. Pitcairn Campbell and Co., Liverpool).—During the fortnight upwards of 2000 tons bars on the spot sold at 84 $\frac{1}{2}$ to 85 $\frac{1}{2}$, and about 1000 to arrive, or with extra prompt, at 84 $\frac{1}{2}$ to 85 $\frac{1}{2}$. On June 3, 2515 tons of ore at Swansea were sold by tender; average produce, 19 p.c. cent.; average price, 14s. 11d. per unit. Arrivals here during the fortnight of West Coast S.A., produce—Garonne, from Valparaiso, 445 tons bars, 90 tons ingots; Corallera, from Valparaiso, 390 tons bars, 95 tons ingots; Bodryddan, from Valparaiso, 32 tons bars. At Swansea, Madeline, from Corral, 540 tons regulus. Stocks of copper (Chilian and Bolivian), in first and second hands, likely to be available, we estimate at—

	Ores.	Regulus
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next week. Tecoma, 10 1/2 to 10 3/4; the advices continue of a most satisfactory character, and the first dividend may soon be looked for. The operations here are still being carried on in a satisfactory manner. From accounts we hear from different sources the late dividend is likely to turn out an exceedingly valuable quantity of ore. Every day is likely to be the last letter from the mine contained the paragon of the bullion turned out during the last run; but, as the shares were not made up, the information received is not published. The petition for a winding-up is set down for to-day. Richmond Consolidated shares have been in demand throughout the week, and after advancing to 6 1/2 to 6 3/4, close 5 3/4 to 6. The cable news for the last week's run is published as \$45,000. It appears that the company has now three furnaces running, and that the remainder of the ore are large enough to supply nearly double that number as they can be erected or hired. It will be remembered that from November to April the company were virtually stopped by the suits brought against them on the part of the "Look Out" location owners. Starting again with one furnace in May, which yielded an average of \$14,000 week, another was started in May, the two furnaces averaging \$28,000 per week until last week. Then another furnace was "fired," the three producing \$45,000. If one-third of this result can be assumed as profit, the shareholders ought to be in receipt of very good dividends at an early date. The contemplated railway to Eureka from Pallasades station, when carried out, greatly reduce existing cost of conversion. We hear that the Lezette Tunnel commenced, some time back by the Richmond Company, is expected shortly to reach the great level of 300 ft. lower than the point to which all the ore now has to be raised, and will thus effect a great saving in labour. The Eureka Company did not obtain any ore from the "Look Out" location, they succeeded for a time in stopping the Richmond Company from working it out. Eberhardt and Aurora, 5 1/2 to 6 1/4; in a letter from Capt. Drake, dated May 24, he estimates that with a large portion of the machinery available from the late International Mill, the cost of re-constructing a 30-stamp mill, with all modern improvements, will not exceed \$10,000; and having regard to the absolute importance of the company possessing its own mill, and to the brevity of the Californian summer, Captain Drake urges the board to give him immediate authority to proceed with its erection. It may be mentioned that the assay value of the ore has improved to \$68 per ton. South Aurora, 1 1/2 Pacific, 3 to 3 1/2; in another column is published a letter from the superintendent, reporting the discovery of a body of very fine ore. This is looked upon as important, as it may lead to a similar course as was laid open the early part of last year. Halcombe Valley, par to 1/2 prem; the inclines on the mammoth are being carried down with all possible speed, and good rock being taken out. The timber for the mill is in course of preparation. In the shares of the Hydraulic Gold Companies a fair amount of business has been transacted, especially in Sweetland Creek, which have been in request all the week, and leave off firm at quotations. Cedar Creek have also been enquired for. The letter circulated at the close of last week by the directors is considered very encouraging for future prospects. Sweetland Creek, 4 1/2 to 4 3/4; the gross produce of gold during the year ending April, 1873, was 5290 oz., which realised 20,896 1/2, the cost during the same period amounting to 11,254, leaving a profit of 9771 1/2. Two dividends, aggregating 600, have been paid during the year. The available balance at the end of profit and loss is 6810 1/2, from which it is proposed to re-commence the quarterly dividends by the payment of a dividend of 5 per share (free of income tax), to carry 5 per cent. on the dividends paid during the year to the reserve fund, and to write off 1000 from the cost of the new tunnel. This will about absorb 1585 1/2, to be carried forward, to which has to be added a profit of 7500, advised by telegram on May 28. The directors, in their report, to be submitted at the meeting on Thursday, contemplate the shareholders on the completion of the new tunnel, with a length of 2440 ft., at a cost of 50500. This most important work was commenced in May, 1871, and finished April, 1873. Working will in future be carried on through this tunnel, and as it commands the whole of the company's ground, increased dividends may fairly be expected. Birdseye Creek, 1 1/2 to 2 1/4; the work here progressing in a satisfactory way. The shortness of water has not made itself apparent. Shares are low, but there are buyers about. We understand that the annual meeting will be held early in the ensuing month. Cedar Creek, 1 1/2 to 2 1/4; the reports continue good, although the short-water season will considerably affect this company, as they anticipated, in common with others, a long supply of water this year, and laid out their plans accordingly. There appears, however, to be no doubt as to the value of the property owned by the company, and the large profits available by-and-by, when the preliminary work now being carried out is finished. Malaga, 1 1/2 to 1 3/4. Rica, 4 to 4 1/2. Van, 3 1/2 to 4; there is no change reported from the mines; the various points are still of the same value as before reported, and all operations are going on in the usual manner. East Van, 4 1/2 to 4 3/4. Van Consols have advanced to 5 1/2, 6, and firm; the cutting of the lode in the 60 fathom level, expected to take place in a few days, is looked for with much interest. Tankerville shares, after declining to 10 1/2, close 11 to 12; the 140, west of Watson's, continues to improve for lead, and it is expected that in two or three fathoms further driving the great deposit seen in the upper levels will be met with holding down. West Tankerville have been quoted flatter, although no change whatever has taken place in the mine. Ladywell are firm at 2 1/2 to 3. Roman Gravel, 20 to 20 1/2. Bog, 1 1/2 to 2 1/4; operations are now in course of progress for continuing the clearing of the shaft below the 148 fm. level; the annual meeting is fixed for the 25th inst. Pennerley, 2 1/2 to 2 3/4; the annual meeting is called for Wednesday; the mine is looking better, especially in the Potter's portion of the sett. West Esquair Lr, 3 to 3 1/4; the new water-lift is erected and will be at work by the end of the forthcoming week. The underground operations are progressing as usual. Great Vor, 5 1/2 to 6; from the report of the quarterly meeting, in another column, it will be seen that, notwithstanding the high price of materials, this company has made a profit since the quarterly meeting in March of 276 1/2, and the returns had increased from 4 up to 25 tons for four weeks. This is entirely due to improvements in the levels driving east of Metal and west of Edwards's. The 164, west of the latter shaft, has been driven 3 fms. on the lode, passing through the last limb of the cross-course; and, although not large, the lode is improving in size and quality as it becomes opened up west from the cross-course. This is very important, because of the large extent of unexplored ground in this direction. East Lovell, 17 to 17 1/2, and in demand; the mine has further improved. South Condurow, 6 to 6 1/4; North Treleigh Wood, 1 1/2 to 1 3/4, and enquired for. Subjoined are the closing quotations:— Bog, 1 1/2 to 2 1/4; Carn Brea, 125 to 130; East Caradon, 2 1/2 to 2 3/4; East Wheel, 15 to 17 1/2; East Van, 4 1/2 to 4 3/4; Great Laxey, 16 to 16 1/2; Great Wheel, 15 to 16; Hingston Down, 6 to 6 1/2; Marke Valley, 2 to 2 1/2; North Treleigh Wood, 1 1/2 to 1 3/4; North Roake, 11 to 13; Pennerley, 2 1/2 to 2 3/4; Parys Mountain, 1 1/2 to 1 3/4; Roman Gravel, 20 to 21; South Condurow, 6 to 6 1/4; Tankerville, 10 1/2 to 11 1/2; Tincroft, 53 to 55; Van, 3 1/2 to 4; Van Consols, 5 1/2 to 6; West Chilver, 11 1/2 to 11 3/4; Wheel Crebor, 5 to 5 1/2; West Tankerville, 10 1/2 to 11; Almaden, 1 1/2 to 1 3/4; Anglo Argentine, 1 1/2 to 1 3/4; 15 percent. pref. 1/2 to 3/4; Birdseye Creek, 1 1/2 to 2 1/4; Cedar Creek, 1 1/2 to 2 1/4; Cape Copper, 20 1/2 to 21; Chontales, 1 1/2 to 2 1/4; Colorado Terrible, 1 1/2 to 2 1/4; Don Pedro, 3/4 dis. par; Eberhardt and Aurora, 5 1/2 to 6; Emma, 4 1/2 to 5; Flagstaff, 13 1/2 to 13 3/4; Frontino and Bolivia, 4 1/2 to 5; Fortuna, 6 1/2 to 6 3/4; Gold Run, 1/2 to 3/4; Last Chance, 7 1/2 to 7 3/4; Malaga, 1 1/2 to 1 3/4; New Quebrada, 4 to 4 1/4; Pacific, 3 to 3 1/4; Port Phillip, 1 1/2 to 1 3/4; Richmond Consolidated, 5 1/2 to 6 1/4; Rica, 4 1/2 to 5; Sierra Buttes, 3 1/2 to 3 3/4; St. John del Rey, 28 to 30; Sweetland Creek, 4 1/2 to 4 3/4; Tuli, 1 1/2 to 2; United Mexican, 2 1/2 to 2 3/4.

Bonds of the Tasmanian Main Line Railway Company, due July next, will be then paid at the Union Bank of London. The North-Western Railway of Monte Video Company (Limited) intimate that the interest on their Seven per Cent. Debentures, due July 1, will be payable at Messrs. Roberts, Lubbock, and Co.'s. The traffic receipts of the Erie Railway Company for first week in June (six days) amount to \$201,000—\$83,200. Messrs. Bischoffheim and Goldschmidt announce that the coupons due July 1 on the issue of \$10,000,000 Seven per Cent. Gold Bonds of the Erie Railway Company, also on the Atlantic and Great Western Railroad Company's Seven per Cent. First Mortgage Bonds, and, together with the drawn Bonds of the Leased Lines Seven per Cent. Rental Trust Bonds of the Atlantic and Great Western Railroad Company for \$3,500,000, or 1,100,000 sterling, and the 1873 issue of \$4,500,000, or 1,350,000 sterling, will be payable on and after that date at their counting house. They further announce that the definitive bonds of the last-named issue may be received in exchange for scrip certificates on and after the 25th inst. The traffic returns of the Galveston, Harrisburg, and San Antonio Railway for the second week in May amounted to \$8173, as against \$4737 for the corresponding week of 1872, being an increase of \$3436.

At the Truro Ticking, on Thursday, 1040 tons of copper ore were sold, realising 5170 1/2. The particulars of the sale were—Average standard, 91 1/2; average produce, 8 1/2; average price per ton, 41 1/2; quantity of fine copper, 87 tons 18 cwt. The following are the particulars of the sales:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
May 22.....	3493	97 8	8 1/2	43	108	7 1/2
June 5.....	2084	99 12	9 1/2	48	120	8 0
June 12.....	1900	91 7	8 1/2	41 1/2	119	58 16

Compared with the last sale, the decline has been in the standard 2 1/2, and in the price per ton of ore about 4s. 3d.

TIN TRADE.—The Standards of Tin Ore were advanced on Tuesday, and are now:—Superior common, 125s.; superior fine, 127s.

The CADIZ WATERWORKS COMPANY are inviting subscriptions for 3018 TEN PER CENT. PREFERRED SHARES of 10l. each, being the balance unissued of the 20,000 preferred shares. The ordinary share capital of the company consists of 15,000 shares of 10l. each. Cadiz, although one of the principal ports of Europe, is entirely without any proper water supply. All attempts to obtain a supply from wells have failed. The cisterns established under most of the houses for collecting and storing the rain-water give only an uncertain supply of inferior quality, and are always dry in the hot season, when water is most wanted. The cost, too, of raising the water to the upper stories of the houses is considerable, a man being kept in most houses especially for this purpose. The greater part of the water used in Cadiz is procured from the springs of La Piedad, being brought by rail and by sea from Puerto Santa Maria, in large barrels, containing 550 litres each. This water is sold to the water-carriers at an average rate of about 15f. per cubic metre (36d. per gallon), and retailed by these at an average rate of about 1 1/4d. per gallon. To supply this deficiency of water a concession was obtained from the Municipality of Cadiz for bringing it from the springs of La Piedad to Cadiz in pipes, with a sufficient pressure to supply the top stories of the highest buildings in the town, and granting a monopoly for the supply of the town for a period of 99 years. A caution money of 1,000,000 reals Spanish 3 per cents. has been duly lodged for the performance of the company's engagements. The tariff allowed by the concession is a very advantageous one, the rates being nearly three times as high as in Paris, London, and most large towns. The Municipality of Puerto Santa Maria have ceded all their water rights and the lands required for the purposes of the works. The contractors, Messrs. Barnett and Gale, are progressing most satisfactorily with the works, which will be completed and handed over to the company before the end of the current year; and the report of the Chairman Mr. W. Hawes, F.R.S., who personally visited the works in September last, fully bears out the high expectations entertained of the favourable prospects of the company. Basing the calculation on less than one-half of the ordinary average consumption of water, the estimated net annual revenue is 49,420f. The annual revenue will be appropriated to the payment of 10 per cent. interest on the 20,000 preferred shares (after paying the interest on 100,000f. debenture shares, estimated at 7000f. per annum), then to the formation of a sinking fund of 1 1/2 per cent. on the amount of preference shares and debentures for their redemption, and all surplus revenue (after paying 10 per cent. on the ordinary shares) will be divided *pro rata* between the preferred and ordinary shares; and if the estimate of income be made upon the basis of the ordinary average consumption of London, Paris, or Madrid, and other large towns, the estimated surplus revenue will be increased more than threefold. The prospectus will be found in another column.

THE ROCKS AND GOONBARROW TIN AND CLAY COMPANY, to the formation of which, with a capital of 80,000f., in shares of 4l. each, reference has already been made, has been well received by the public, a large proportion of the shares having, it is understood, been already applied for; and in the Supplement to this week's Journal will be found a "Note on the Rocks and Goonbarrow Mines, near St. Austell," by Mr. J. H. Collins, F.G.S., recently communicated to the Miners' Association of Cornwall and Devon, which will be of much interest to all connected with the mine or district. It is remarked that the geological and physical features of the property are all that can be desired for the class of tin ore which is the main object of the company—black oxide of tin. The sets are on the eastern declivity of the Hensbarrow granite boss, the lodes in which have undoubtedly been the principal sources whence the tin stream depends on. The amount of preference shares and debentures for their redemption, and all surplus revenue (after paying 10 per cent. on the ordinary shares) will be divided *pro rata* between the preferred and ordinary shares; and if the estimate of income be made upon the basis of the ordinary average consumption of London, Paris, or Madrid, and other large towns, the estimated surplus revenue will be increased more than threefold. The prospectus will be found in another column.

THE EMMA MINE.—We have received several letters respecting the affairs of this company, including one from Mr. Hammond, but we have thought it better to defer their insertion. We also have some remarks in type on articles which have appeared in the Utah papers.

MR. E. CAVENDISH TAHOURDIN, SWORN STOCK AND SHARE BROKER, 13 AND 14, CORNHILL, E.C., 40, REGENT'S CIRCUS, PICCADILLY, W., AND SHREWSBURY, has for SALE, for CASH or ACCOUNT, the following SHARES, and is also prepared to Sell the same for delivery in three or six months, on receipt of a cover of 25 per cent. of the purchase-money, or to make advances thereon on moderate terms:—

Buyer.	Seller.	Buyer.	Seller.
Aberdonant	12s. .. 14s.	New Dolcoath	2 1/2 .. 2 3/4
Billy-Crib	1 1/2 .. 1 3/4	North Tankerville	1 1/2 .. 1 3/4
Bog	1 1/2 .. 1 3/4	Old Batholows	1 1/2 .. 1 3/4
Boscawell Downs	1 1/2 .. 1 3/4	Pennerley	2 .. 2 3/4
Birdseye Creek	2 .. 2 1/2	Pennerley	2 .. 2 3/4
Brackley	14s. .. 16s.	Parys Mountain	7s. .. 9s.
Clec Hill Colliery	1 .. 1 1/2	Plympton	1 .. 1 1/2
Carn Brea	122 .. 125	Perkins Beach	6s. .. 8s.
Carn Allan	3s. 6d. .. 4s. 6d.	Richmond Consols	5 1/2 .. 6
Cook's Kitchen	19 1/2 .. 20 1/2	Roman Gravel	20 .. 20 1/2
Chontales	3 .. 3 1/2	Rookhope Valley	3 1/2 .. 4
Cedar Creek	17 .. 17 1/2	South Carn Brea	3 1/2 .. 4
Devon Consols	5 1/2 .. 6	South Condurow	5 1/2 .. 6
Don Pedro	10s. .. 15s.	South Tolarne	7 1/2 .. 1
East Foxdale	1 1/2 .. 1 3/4	St. Just Amalgamated	1 .. 1 1/2
East Van	4 .. 4 1/2	South Roman Gravel	32s 6d .. 35s.
Emma	4 1/2 .. 4 3/4	St. Ives Consols	4 1/2 .. 4 3/4
East Lovell	16 .. 17	Sweetland Creek	4 1/2 .. 4 3/4
Eberhardt	5 1/2 .. 6	Tankerville	11 .. 11 1/2
Esquair	10s. .. 15s.	Tincroft	1 .. 1 1/2
Flagstaff	12 1/2 .. 13	Tuli	1 .. 1 1/2
Grogrinon	2 .. 2 1/2	Van	39 .. 40
Gold Run	5s. .. 7s.	Van Consols	5 .. 5 1/2
Gawton	1 1/2 .. 2	West Basset	10 .. 11
Great Laxey	16 1/2 .. 16 3/4	West Tankerville	3 .. 3 1/2
Hingston Down	6 .. 6 1/2	West Wheel Lucy	1 .. 1 1/2
Lovell	6 1/2 .. 6 3/4	West Jewell	1 .. 1 1/2
Last Chance	7 .. 7 1/2	Wheel Crebor	5 1/2 .. 5 3/4
North Treleigh	1 .. 1 1/2	Wheel Greenville	4 .. 4 1/2
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on or before the 7th day of July next, notify such intention to the Secretary of the
Board of the above-mentioned district, CHARLES HENRY JAMES, Esq., 5, Courtland
Terrace, Merthyr Tydfil, from whom all information as to particulars can be
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By order of the Board, CHARLES HENRY JAMES, Secretary.

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20 East Van, £4 1/2.	40 South Roman, 35s.	40 Roman Gravel, £20.
25 North Tankerville, 17s.	25 Van Consols, £5 1/2.	Tyllwyd, £1 1/2.
60 Old Batholows, 25s.	20 West Tankerville, £3 1/2.	
FOREIGN.		
40 Emma, £4 1/2.	10 Gold Run, 7s.	25 Sweetland, £4 1/2.
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the counties of Cardigan and Montgomery, and the many properties placed at the
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Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt: it then forms an accumulating useful work of reference.

FLORENCE AND TONKIN (Callington).—I should be glad to know, through a correspondent, if these mines are working or not, as I have not seen a report from our manager for some months. This ought not to be. How are the outside shareholders to know how things are going on? I have great faith in the mine, if worked in a miner-like manner.—A SHAREHOLDER FROM THE COMMENCEMENT.

THE MANSFELD COPPER PROCESS.—"R. J." (Greenwich).—The peculiarity of the processes in use at Mansfeld, and which were designed to facilitate the treatment of the exceptional class of ore treated, was fully described in the *Mining Journal* some years since. The poor copper process represented in the Prussian Court at the Exhibition of 1862 was, we believe, that in use at Stadberg.

BONANZAS AND CARBONAS.—"A. P." (Penge).—It would seem that, correctly defined, both *bonanzas* and *carbonas* would mean a rich pocket of ore unexpectedly met with or occurring in a vein of very varying richness. Mr. Chas. Fox, the well-known Cornish authority, with regard to the latter word suggests that it is of Semitic origin *karbona* in Syriac, and *karbon* in Hebrew, meaning an offering or gift, and with some modification an opening. Suddenly cutting into such a treasury might well, he remarks, have been considered by our ancestors as a welcome bonus (the *bonanza* of the Mexican miners) in addition to the profit of the lode itself. In America the word *bonanza* may imply a similar deposit separate from the vein.

HOLCOMBE VALLEY MINING COMPANY.—I sometimes see in the *Journal* mention made of the Holcombe Valley Mines. Can any of your numerous correspondents give some information about this company, where are the mines situated, product, &c.? As I am unable to obtain any reliable particulars.—T.: June 20.

COPPER QUOTATIONS.—"B. C." (Manchester).—The margin was undoubtedly large, but the market is very unsettled. In future the price shall be given with the smallest possible margin.

FORMATION OF PUBLIC COMPANIES.—In noticing Mr. Spearman Farries' volume—"Joint Stock Companies: being a Practical Treatise on their Formation, Management, and Winding Up," it was remarked that the compulsory use of the word "limited," as part of the name of every company, was probably referred to, although the writer of the notice did not see it in glancing through the book, nor could he find it by the aid of the index. The surmise was a correct one, for Mr. Farries writes that on referring to the Act he will find that this part of the subject is treated under the head of "Memorandum of Association," that being really the initiative official document (Section 8), and not the prospectus. Under this head, also, Mr. Farries has treated it, as he will perceive on referring to Clause 25 in his book, so that in this case he has adhered strictly to the Act.

AMERICAN SUBSCRIBERS.—In reply to several enquiries, it may be stated that subscribers in the United States can be supplied with the *Mining Journal*, post free, at the price of \$3 gold per annum, payable in advance, by remitting to Mr. D. Van Nostrand, publisher, and importer of scientific books, &c., Murray-street, New York, or direct to our Office, 25, Fleet-street, E.C.

Received.—"C. H. S."—"J. W."—"E. S. R."—"One Bitten"—"H. S."—"Shareholder" (Emma)—"R. A."—"J. R."—"R. S."—"W. P."—"W. T. B."—"A Shareholder" (Camp Floyd)—"R. C."—"E. B."—"S." next week—"A Shareholder" (Carn Brea).

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, JUNE 21, 1873.

ACCIDENTS IN COLLIERIES—THE PRIZE ESSAYS.

The result of Mr. HERMON's liberality in offering prizes for the best essay upon the preventing of accidents in mines by explosion, and otherwise, must be as gratifying to that gentleman as it will be useful to the great mining population of Yorkshire and the more northern counties whom he so generously desired to serve. Mr. HERMON's prizes were to be competed for by persons practically acquainted with mining; and the direct object in view was to ascertain the causes and the means of preventing the terrible explosions which from time to time take place. It was very properly made an essential condition that the essays should be practical. Whatever others might have thought, Mr. HERMON seems to have been well aware that the offer of 200*l.* would be sufficient to tempt those who were not only practically but also scientifically acquainted with mining operations to enter into the competition. He, however, took care to provide that the less educated mine worker should be under no disadvantage in competing with his more scientific competitor, by providing that the umpires in awarding their prizes should not in the slightest degree regard the merits, or even the demerits, of the essays as literary compositions. The result has been that essays to the number of about 300 have been sent in to compete for the prizes. These have been of various degrees of excellence, ranging from those of the ordinary mine worker to the productions of some of our most accomplished and experienced mining engineers. Forty, at least, of the essays show that the most precise, accurate, and practical knowledge of mining operations distinguishes persons who are able to explain, with scientific accuracy, even down to the most minute detail (mechanical and chemical), all the processes of the mines they practically superintend. The authors of some of these last described essays are, we believe, ordinary underground sub-managers. There are numerous other essays by gentlemen who have the theoretical without the practical knowledge, and still more by those who have the practical knowledge, more or less extensive, without sufficient of the theoretical to make their views intelligible outside the sphere of those who understand the vernacular in which their sagacious practical suggestions are conveyed.

As might be expected, Ventilation is a subject to which all the essayists addressed themselves, in the first instance, in showing how explosions may be prevented. Different methods of laying out the workings are suggested, together with the arranging of the airways, and the securing of a sufficient current of fresh air to every workman. The competition of fans and furnaces as a means of creating a current is fully, we may say thoroughly, discussed. Above all, the means of so separating the workings that an explosion in one part would not extend to the others—a practice analogous to that which is known in shipbuilding as water-tight compartments—is brought out in great force in some of the essays. If Mr. HERMON had done nothing more than induce a large number of persons practically engaged in mining operations to define their own knowledge, reduce it to language, and put it upon paper, he would have done an incalculable amount of good. But Mr. HERMON has done more than this. He has induced them to do it with an important purpose—that of giving to the world that which is ascertained to be the very best instruction for so conducting mining operations as to provide the maximum of security for human life; for we assume that the prize essays will be published. When they are published we are quite sure that the most humble of the competitors will feel that in one important respect justice has been done to him, and that the practical value of the essays has been fully considered by the judges, who have not been unduly influenced in giving their award by an over-estimate of the value of theoretical or scientific information. When the prize essays are printed we are confident further that, although the most recent scientific knowledge is brought to bear actually and really upon every operation of the mine, the most ample consideration is given to, and the most intimate practical knowledge shown of, every working detail in coal mining.

The essays it is believed will have a beneficial influence upon mining operations, in promoting safety of mining work, which we are persuaded will be felt for very many years to come; but Mr. HERMON will not even in sentiment reap his full reward, because there can never be pointed out the individual women who would have been widows, or the individual children who would have been orphans, but for his generosity. Still, as a matter of abstract truth, he has saved many human lives, although the persons whom he has rescued cannot be pointed out. We do not know how sufficiently to express our thankfulness to Mr. HERMON for this. The best homage we can render him is to hope that that which he has so generously inaugurated may lead other wealthy mineowners, who feel a sense of responsibility to their workmen, to follow his example. Mr. HERMON's prizes related to the mineral field with which he is more immediately connected; and particularly to the class of accidents from which the workmen there are in the greatest danger. Where the coal measures are deposited evenly in the earth, and lie at great depth, expensive plant is required to work them to a commercial profit. The larger the area the more science and the more care are

required in ventilation. Depth adds somewhat, although not much, to the difficulty of ventilation; for the larger the area the greater the danger of accumulation of gas. But the essayists have shown, beyond what must have been Mr. HERMON's most sanguine expectation, what are the best known modern means of providing the maximum of safety for colliers working in such mines.

What, however, about the districts where the various strata are dislocated by volcanic and other natural convulsions, where the area over which the mines lie flat is small, where the roof is tender, where the shafts are liable to be displaced by "creeps," where the difficulties of falls from the roof, of "gawling-in," and the other many merely mechanical accidents in mining are to be met? Will not some great mine proprietor in the old field of South Staffordshire and East Worcestershire feel so encouraged by Mr. HERMON's success as to be stimulated to offer a sum adequate to the work to be performed to induce practical miners and mining engineers to write essays upon the best means of preventing shaft accidents by the economically constructed shafts and winding apparatus, which are the best that at present some of the mineowners in South Staffordshire and East Worcestershire know how commercially to afford—where they cannot have breaks and cages and self-acting covers, and all the other scientific appliances with which the shafts and the winding apparatus of the great mines of the North are provided? In that same Midland district, too, the shaft accidents are supplemented by that still more serious class of fatalities which include falls from the roof by slips, "blakes," from cleavage, "bumps" from the bad propping, and all the other accidents that are as peculiarly incidental to it as explosions to the district in respect of which Mr. HERMON invited competition. We would not advise any alteration in the conditions as to the people who should compete, but merely that the district should be changed, and that shaft accidents, and accidents by "falls," and other such misadventures should be put in the same prominence that explosions were by Mr. HERMON. The mining world cannot be too often reminded of the greater loss of human life by such causes than from explosions. In the year 1871 the colliers killed by explosions of fire-damp were 269, whereas those who lost their lives by "falls" numbered 435. In the previous year (1870) the difference was even greater, for whilst the deaths from explosions were 185, those from "falls" were 411.

We fully believe that there are men in South Staffordshire and East Worcestershire who can show as much minute and practical knowledge of mining operations, combined with sound modern scientific information, as those who may be so justly proud of having been adjudged the winners of Mr. HERMON's prizes.

ENGLISH IRON ABROAD.

There can be no doubt that the demand for our railway iron in the United States has experienced a very serious check,—a check from which it will probably recover only slowly, if, indeed, it ever recovers at all. The extraordinary advance which has taken place in the price of British iron has had the effect of greatly stimulating American production; and as the construction of railroads in the United States is also proceeding at a somewhat slackened rate, the consumption of British railway iron among the Americans has been progressively falling off during the last few months. This will be seen on a glance at the annexed table, illustrating the exports of British railway material to the American Republic during the first five months of the last three years:—

Month.	1871.	1872.	1873.
January.....Tons	28,264	35,299	27,838
February.....	32,754	53,131	21,063
March.....	41,917	41,175	29,552
April.....	32,456	50,554	12,142
May.....	64,444	40,540	20,557

Total.....169,865.....221,093.....102,452

There is nothing very surprising in this result since, although the exports in the first half of this year were little more than half the corresponding exports in the corresponding period of 1871, the value of this year's shipments was 1,369,252*l.*, as compared with 1,505,774*l.* in the corresponding period of 1871. American railways depend for their very existence upon cheapness of construction. If a line cannot be made in the United States for a moderate outlay, it is simply not made at all. The American railway interest is undergoing a gradual change, lines having a tendency to group themselves together as in this country; and the great systems resulting from amalgamations can possibly afford even expensive permanent way materials, but the case is entirely different with the extensions carried into thinly inhabited states or territories. The feverish activity which was displayed, then, in 1870 and 1871 in the construction of new American railways has accordingly greatly abated, and it seems very doubtful whether we shall send more than 250,000 tons of our railway material to the United States this year. The exports would not be maintained at even this relatively respectable total but for the considerable demand which still prevails in the United States for English steel rails, which find much favour with such undertakings as the Pennsylvania, the Chicago and North Western, the Baltimore and Ohio, the New York Central, the Erie, and, in fact, all the large networks which can afford to expend capital with a certain fearlessness and lavishness.

We have dealt in considerable detail with the demand which prevails for our railway iron in the United States, and we have done so because the Great Republic is the best external customer for our iron. It may be well, however, to note what is passing in other countries as regards the consumption of our railway material. The Russian demand has somewhat revived this year, having absorbed 33,318 tons to May 31, as compared with 13,153 tons in the corresponding period of 1872, and 34,198 tons in the corresponding period of 1871. English iron appears to have been superseding Belgian to some little extent of late in Russia; and the construction of Russian railways having been prosecuted with considerable vigour during the last two years, even the strenuous efforts made to develop an independent Russian metallurgy do not appear to have counted for much. Strangely enough, in spite of the Carlist troubles and the political disorganisation which affects Spain, we have been sending rather more railway iron to that country this year than in 1872, the exports to May 31 having amounted to 6377 tons, as compared with 5498 tons in the corresponding period of 1872, and 4859 tons in the corresponding period of 1871. It is to be hoped that English ironmasters who have been trading with Spain will not make any bad debts in consequence. It is extremely regrettable to find that the demand for our railway iron in the principal South American States has exhibited great weakness in the first five months of this year, the exports comparing as follows with those effected in the corresponding periods of 1872 and 1871:—

State.	1871.	1872.	1873.
Brazil.....Tons	8,499	9,147	3,507
Peru.....	7,757	18,179	4,497
Chili.....	2,329	945	2,241

Total.....18,585.....28,271.....10,245

The remarks which we have already made with regard to North American railways apply with almost equal force to South American lines, which must perforce stand over until some favourable period, unless cheap rails can be obtained for their permanent way.

Some consolation may be found in the fact that the demand for our railway iron is still improving in British America, British India, and Australia.

MR. HERMON'S PRIZES.—We are informed that the writer of the Essay sent in under the assumed name of Robert Elvin (and which the adjudicators bracketed with Mr. Galloway for the first Hermon prize) is Mr. Wilfred Creswick, M.E., George-street, Sheffield.

EXPORTS OF RAILWAY IRON.—The exports of railway iron from the United Kingdom this year have been, upon the whole, better maintained than might, perhaps, have been expected, having regard to the great elevation in prices. At the same time, a marked decline has taken place. The exports of May amounted to 86,975 tons, as compared with 87,617 tons in May, 1872, and 120,997 tons in May, 1871; and in the five months ending May 31 this year to 274,795 tons, against 296,878 tons in the corresponding period of 1872, and 373,139 tons in the corresponding period of 1871. The United States only

took 102,452 tons of our railway iron to May 31 of this year, as compared with 221,033 tons in the corresponding period of 1872, and 199,865 tons in the corresponding period of 1871. The exports have increased this year to Russia, Sweden, Germany, Holland, France, Spain, and the Spanish West Indies, Chili, British America, British India, and Australia; but they have decreased to America, Egypt, the United States, Brazil, and Peru. The value of the railway iron exported in May was 1,108,272*l.*, as compared with 890,011*l.* in May, 1872, and 959,162*l.* in May, 1871, and in the five months ending May 31 this year 3,624,419*l.*, as compared with 3,544,487*l.* in the corresponding period of 1872, and 2,910,175*l.* in 1871.

VIENNA EXHIBITION.—We have sent out a Special Correspondent to Vienna, who will report on matters more or less bearing on the mining and metallic industries as represented in the Exhibition. The country of Europe has better mineral resources than Austria, for, with the exception of platinum, there is scarcely a metal used in the world which is not extensively used in that country. Our Correspondent is further instructed to visit the mining centres in that country; and under the head of "Austrian Mining," to describe points of interest in the coal and metal mines or works that are most worthy of visitation.

MINING WEALTH OF BOLIVIA.—The production of silver ore from the Caracoles Mines is now yielding the Bolivian Government monthly about 75,000*l.*, or an annual sum of nearly a million sterling. The greater part of the ore comes to this country, yielding 100*l.* per ton.

COMMERCIAL ENTERPRISE IN PERSIA.—The Persian concession as described by the Berlin correspondent of the *Times*, is perhaps the most remarkable transaction of the kind of which there is any record. It really amounts to this, that the Shah has granted to Baron Reuter—the enterprising gentleman whose name has been familiar to all newspaper readers by "Reuter's telegrams"—a 70 years' lease of the Caspian Sea and the Gulf of Persia, as well as any other lines he may think fit to lay down. He is guaranteed against competition, he will have all the Government land he requires free of cost, and in the execution of the enterprise he will be exempt from the burdens and inconveniences of taxation. He is also to enjoy a monopoly of all the Government mines, with the exception of a few silver, and precious stones, are to be handed over to him; and his other privileges under this head will virtually make him master of the mineral wealth of the country. He secures a right of preference as regards banks, credit institutions, telegraphs, supply of gas, roads, mills, and manufactures; and, to crown all, he obtains the management of the Customs of the kingdom for a period of 25 years. The Shah does not, of course, confer these sweeping privileges without what is termed consideration, but that such a concession should have been granted on any terms is a fact of extraordinary interest. Baron Reuter's engineers have been considered to have passed beyond the paper stage.

We understand that Mr. BRENTON SYMONS, formerly engineer of the Chontales Gold and Silver Mining Company, has been appointed superintendent of the extensive mining and smelting works of the Serbian Copper and Iron Company.

REPORT FROM SCOTLAND.

June 18.—The Pig-Iron Market has been very dull during the week, and a decided relapse has taken place in the prices of all descriptions. The price of warrants, which was about 11*l.* 4*s.* 6*d.* at the date of our last report, gradually gave way, and was on Friday afternoon, 11*l.* 6*d.* This week there has been even more anxiety to sell, and the cash price of warrants ranged from 11*l.* 1*s.* 6*d.* to 10*l.* 9*s.* 6*d.*, which was accepted on Tuesday afternoon. There was, however, a sharp reaction from this point, and the closing price of the day was buyers 10*l.* 10*s.* To-day the market opened at 10*l.* 10*s.* 6*d.* and receded to 10*l.* 9*s.* 6*d.*, closing, after a good deal of business, at a better tone; buyers 10*l.* 10*s.* The prices of makers' iron are somewhat irregular, but the principal reduction has been in the value of No. 1 special brands, which have now come to a more natural level compared with other iron.

No. 1.	No. 2.
G. M. B., at Glasgow (deliverable alongside).....	110 <i>s.</i> 6 <i>d.</i>110 <i>s.</i> 6 <i>d.</i>
Gartsherrie ditto ditto.....	121 0.....112 6
Coltness ditto ditto.....	121 0.....112 6
Summerlee ditto ditto.....	121 0.....119 0
Carbarnock ditto ditto.....	117 6.....112 6
Monkland ditto ditto.....	117 6.....112 6
Langloan, at Port Dundas ditto.....	120 0.....113 0
Caldar ditto ditto.....	121 0.....112 6
Glenarnock, at Ardrossan ditto.....	117 6.....112 6
Eglinton ditto ditto.....	112 6.....112 6
Dalmellington ditto ditto.....	111 0.....109 0
Carroll, at Grangemouth, selected, ditto.....	123 0.....
Shotts, at Leith ditto.....	125 0.....113 0
Kinnell, at Boness ditto.....	117 6.....112 6
Bar iron.....	£13 10 to £14 0
Nail rods.....	14

Week ending June 15, 1872.....Tons 21,239
Week ending June 14, 1873.....10,102

Decrease.....4,937
Total decrease since Dec. 25, 1872.....126,111

Imports of Middlesbrough pig iron into Grangemouth:—
Week ending June 15, 1872.....Tons 920
Week ending June 14, 1873.....502

Decrease.....418
Total decrease for 1873.....2179

The feature of the pig-iron market noticed above is a decline 10*s.* a ton since last report, while the stocks in store are running down; and when we have reached the *ultima thule* of reduction, no stocks remain to draw from, what may we expect will be the result? The transitory condition of the pig-iron market is rendering nugatory all efforts to secure orders for bar-iron, and a decline of 20*s.* a ton is daily expected to be announced by makers, most of whom are employed on the mere dregs of former orders. Engine-works are busy, and we hear of one district who are about to agitate a quiet, but copper workers are very full of orders.

Coals—with a Miners' Union awaiting arbitration—have been advanced 1*s.* a ton, lest a strike of 40,000 miners ensue; but we understand that at the conference between masters and men held on Monday the miners made a very feeble display of reasonable cause against the "Special Rules." Sheriff Galbraith, who is an excellent lawyer) presided over the meeting by mutual consent. After the business it was explained that only a few of the owners in Ayrshire were represented, and that in consequence of a settlement having been effected with the Glasgow and Clyde Coal Company, the owners of that company, Mr. McDonald then stated the case for the workmen, asking that they should be in the same position as the North of England miners, and representing that they would not object to place props to secure their own working places, that they desired deputies to be appointed for this special department of pit labour. Reply for the owners, Mr. Burns maintained that in assuming the attitude they had done they had followed the example of the Associated Mineworkers of Lancashire and Cheshire, and of five-sixths of the English employers; and that the rules had been adopted in Northumberland and Durham were promulgated by the owners, and left the question of "duty" in a very ambiguous state. Mr. McDonald claimed that he was in a position to state that there were only three places in Scotland and Wales where the rules had been agreed to. The workmen in all other places were taking objections to the rules.—The Chairman: Are they proved by the Secretary of State?—Mr. McDonald: They are approved of in instances by the Secretary of State; but the workmen, like those in Scotland, object to them. After a long seditious, the Conference adjourned to allow the parties to consider further each other's explanations before coming to a decision.

The new method of producing gas for lighting purposes was discussed at some length during the Edinburgh meeting of the British Association of Gas Managers last week. Mr. Gore, of London, who read the paper introducing the subject, condemned the new gas as the ground mainly of its impurity from the large admixture of carbonic acid and sulphuretted hydrogen. He contended that no material or process invented up to the present time could compete with coal in the manufacture of illuminating gas. Subsequent speakers, however, very favourably and hopefully of the new gas, which can be made of a given illuminating power at a cost of 1*s.* 8*d.* per 1000 cubic feet, whilst coal gas of a quality costs 5*s.* 6*d.* At Chichester, where the water gas is produced, it has repeatedly used alone; but owing to its unsuitability to the common gas burner, in general use there, it has been found necessary to mix with it a proportion of coal gas. In this form there has been no failure whatever. The materials required in production of the gas are coke, iron, water, and spelter. The tons of coke will produce 122,000 cubic feet of gas. The first process required is to gasify the coke at a cost of 1*s.* 8*d.* per 1000 cubic feet, and the purifying operations bring up the cost to 1*s.* 8*d.* per 1000 feet. It was generally acknowledged that the new method was in the experimental stage, but for the most part the authorities who spoke appeared to entertain confident hopes of its success.

The shipments of coal from the Scotch ports (five ports have now no return) for the week just ended were 39,772 tons, against 32,065 tons in the corresponding week of last year.

Young's Paraffin Light and Mineral Oil Company annual meeting

was held on Tuesday—Mr. John Orr-Ewing, of Levenfield, Chairman, presiding. The report was adopted, and a dividend declared at the rate of 6½ per cent. per annum. Messrs. Fend-r, Arthur, and M'Ewen were re-elected directors.

REPORT FROM CORNWALL.

June 19.—There is a very practical illustration of the confident belief entertained in the good future of the tin trade in the increased demand and enhanced prices for mining shares. Some have gone so far as to state that a recovery of 10% in the standard may be anticipated almost immediately. It is not at all unlikely that before long there will be a recovery quite to that extent, but there will be a jump of anything like that amount. Drops are always rapid than rises. However, the rise of 3% yesterday is a very substantial instalment, and has had its effect already. We have several times previously pointed out the desirability—we would rather say the necessity—on the part of the tin producers taking some action to steady the market, and prevent those unanticipated, unaccounted-for fluctuations which work so much mischief. Hitherto, however, the difficulties in the way of smelting on the mines appear to have been insurmountable—capital is wanted to compete with the smelters in this direction, and plenty of it. But another suggestion is now made public which is not open to this great drawback—and that is that there should be a kind of Mines Union, in which the managers and pursers, and possibly other delegates, should represent the various mines, and hold periodical meetings for the protection of their mutual interests. This might be called monopoly; but it would really be fighting monopoly with its own weapons, and it would be nothing more than is already practised by ironmasters and colliery owners. When all is said and done, the tin mines of Cornwall are the chief source of the production of that metal; and if when the smelters say "We won't buy except at such a price," the tin miners say "We won't sell except at such a price," the difficulty would be soon allayed. Then we won't sell," the difficulty would be soon allayed. If stocking has paid in individual cases, as we well know it has, how much better would it pay if conducted upon so large a scale as this. There could be no danger in the course. There is no doubt that the tin mines, and in spite of all that has been said about foreign competition, our firm conviction is that that is a gradually decreasing quantity.

To turn once more to the labour question. The *Western Morning News* contains some excellent remarks upon this head, which point to a serious blot in the labour arrangements common in certain districts. We need not indicate the localities more closely than to say that they are not those in which emigration has been least active, and mining most productive. When your readers have read what follows they may settle the question of cause and effect for themselves.

The present mode of setting and paying by the month has damaged the mining industry seriously. In some mines the men have the set at a certain price per month, but managers arrange so that only a certain quantity of ground shall be set during the month, and this frequently induces the miner to do as little work as possible during one part of the month. It frequently occurs that the miner's set can be done in three weeks, but the miner has to make it last four weeks, and the result is that he gets less wages, less ground is broken, less stuff is raised, and the profits are less. A different plan is now pursued in other mines, and the result is better. The set is given to the men, and they break as much ground as they can, and they are better pleased; and the adventurers get the profits. It is a common mistake notion can prevail in mining than that of stinting the men. It is as bad as Trades Unions fixing the wages and the number of apprentices. The men know and feel that they are kept down, and that the manager does not intend to get more than a certain wage per month. This discourages them, and gives them no interest in working hard or making discoveries. Mines, consequently, are not opened, and everything belonging to the mine is damaged. Instead of the present system it would be well to offer a bonus to men who do a large quantity of good work in a short time, whether each portion results in discoveries or not. This was the method of working among all the good managers and captains of former times, and its adoption now would take the screw off the men, and make them feel that it was their own interest, as well as that of their employers, for them to work hard. Mine agents and captains must rouse themselves, or Cornish mining will slip out of our hands, not for want of stuff, but for want of spirit, energy, and energy.

These are very sensible remarks. They put in a concise form what has been urged over and over again in these reports, that the change from the five-week to the four-week month could be of no possible advantage unless men were given a fair price in right, and allowed to earn all they could. There are many mines yet, however, in which the vices of the old system still exist to aggravate the disadvantages which, under such conditions, must attach to the new. The truth is that there are many managers who do not see that if a man does 40 worth of work in a month instead of 41 the mine, if the work set is legitimate, is by so much the gainer. Where is the advantage of restricting a tributer (say) to 20 tons of ore a month if he can raise 30? If he gets more, in the latter case are not the adventurers precisely in the same position, and is it not a fact that the greater the yield in proportion to the ordinary establishment charges the more economically is a mine worked? The three-shift system has almost disappeared, why should we not get as much as possible out of the shifts that remain? There are managers that will no doubt be "surprised to learn" that there are mines in West Cornwall in which many contracts are made with the men for 12 months, whilst six is quite a common term, and that without the least "stent." In these mines the labour difficulty has really not been felt. Further particulars may be learnt not a hundred miles from Carn Brea.

The China Clay trade in Cornwall, it is satisfactory to hear, is very prosperous just now. The demand is said to be greater than ever before known, and the only difficulty is to get sufficient hands to work the pits. This is the bright side to the dark picture presented by the mining industry of the county.

Cornwall is to be congratulated upon the present aspect of the Mining Question, Sir John St. Aubyn upon the admirable speech in which he made the views of the county known, and the county phalanx generally upon the manner in which they came up to the support of their leader. The conditions had not looked too hopeful, being that the House were hardly able to settle how to assess plantations, much less mines, but Sir John's speech on Thursday was clear and exhaustive, and convinced the House, as well as Mr. Stansfeld, who was no doubt, glad to steer into the haven of refuge opened for him by accepting frankly the principle of the rating of royalty, which is at once equitable and intelligible. In all likelihood the Bill will now pass. If it should not, however, it will be rather awkward for the mines in the Liskeard Union.

It has been calculated that the new joint-stock mining and allied concerns brought out for Cornwall in 1872 would have required a capital, if the entire amount authorised had been raised, close upon 1,000,000. Some of these mines did not "take," and others are now in process of liquidation. In this respect they are not much worse off than the cost-book mines started within the same period. Not a few of these have passed into oblivion, and there are others whose "knocking" is imminent. Among the latter we are afraid Poldice must be reckoned, and we could mention others that are not at all likely to last out the year. Our mining list will not be largely extended after all by last year's *furor*.

But for the unfortunate accident to the goods train at the Camel's Head viaduct a few weeks since the Cornwall Railway would actually have turned the corner during the present half-year. Even now it is by no means certain that it will not, and shares which not very long ago were really unsaleable are rising in price in consequence. The company are carrying out many improvements, the principal one at present in hand being the enlargement of the station yard at Looe-viaduct. It is also intended to do away with a couple more of the timber viaducts. The line must benefit, too, though not so much as might have been the case, from the Cornwall mineral railways. The way in which these latter works are being pushed on considerably astonishes the tolerably numerous class of people who think that fuse and bustle are necessary accompaniments of active work. Nearly 300 men are engaged at various points, immense quantities of iron ore are being raised and stacked, the railway between Fowey and Par is making very rapid progress, and at Fowey the blast-furnaces are being proceeded with, the whole of their ironwork being on the spot or on the way.

There are few directions in which the extraordinary conservatism of action which characterises so unfortunately so many of our miners is more observable than in blasting operations. It is quite 60 years since the use of iron tamping-bars and the like was condemned, yet now we have another death arising (at Crenver and West Abrahams) from boring out a hole of dynamite which had missed fire with an iron bar. Dr. Foster, the Government Inspector, is, however, very active in the discharge of his duties, and we may, therefore, expect to see this class of casualties not be accidents—steadily decreasing.

The reports and proceedings of the Miners' Association, just issued,

are exceedingly satisfactory, save in two particulars. The work done was certainly never better, and that in every respect; but we regret exceedingly to find that continued ill-health has compelled Mr. Robert Hunt, F.R.S., to resign the post of hon. secretary; and we regret, too, that the balance against the association in the working of the year has slightly increased. Here the mines are chiefly at fault. The donation list since 1859 only contains the names of 20, and the subscription list only those apart from individuals—of three. Now, seeing how enormously the good effected by the association might be extended if it were but out of debt, and its income were increased 100%, this state of things is not creditable. However, if mining prosperity does not enhance that of the association, it is satisfactory to find that depression likewise has little effect in lowering it.

"CUSTOM" IN MINE BROKING.—At the Truro County Court (before Mr. M. Bere, Judge) the case *Hobson v. Hawke* was decided. The parties in this case are mine brokers, the plaintiff residing at Truro and the defendant at St. Day. Mr. J. R. Paull appeared for the former. It appeared that the plaintiff sold the defendant 20 shares in the Unity Wood Mine on March 27 last, to be delivered on April 20 at Redruth, for 17. 8s. per share. They were sold for "time on" to next account, and when the time had expired the defendant did not come to Redruth as agreed. The plaintiff wrote to the defendant, and, after keeping the shares for a fortnight, sold them for 1s. each, thereby losing 8s. by the sale, and this was the amount now claimed. The defendant stated that he did not go to Redruth because he had other business to attend to, and he contended that the rule of the market was to give three days' notice and sell the shares. In this case the shares were constantly going down, and if they had been sold then they would have realised more money. The Judge ascertained that at about the time the shares ought to have been taken up they were quoted at from 23s. to 25s. Captain Tonkin said there was no rule as to three days' notice, and he spoke from 20 years' experience. Mr. Mitchell, tailor, who said he had had several years' experience in the market, said there was such a rule, but he had never received such a notice himself. His Honour gave judgment for the plaintiff for 51. 5s., and the defendant, who stated that he had heavy losses lately, asked to be allowed to pay the money in two instalments within a month, and the application was granted.

PROVIDENCE MINES.—The meeting will be held at this mine on Wednesday, when, we are sorry to say, there will be the necessity of making a call, the first for many a long year. Who does not hear with profound regret that these once celebrated, productive, and profitable mines have entered the calling list? It will almost break the hearts of some residing in the western district.

TRADE OF THE TYNE AND WEAR.

June 18.—There is again quite a lull in the Coal and Coke Trades, and coals of all kinds can be had on rather easier terms, still the trade shows a wonderful amount of vitality, but it must be considered that the quantity raised is being gradually increased. New sinkings, winnings, and extensions of old works are in progress in all directions, and, so far, there has been little difficulty in getting additional hands when they are required. Numbers of sailors, farm labourers, as well as miners from the lead districts of Alston, Cornwall, &c., have lately entered the coal mines, so that it is clear new hands can be got, and, looking at the scale on which new winnings are being made, it would indeed be wonderful if the trade did not show some weakness. At present coke can be had in some cases under 40s. per ton, and coals vary in price from 15s. to 18s. per ton at the pits, according to quality, and prices may be expected to recede further shortly. In some cases collieries situated at a considerable distance from the shipping places are pressing sales, and, in order to do so, are accepting even lower rates than those mentioned for coals at the pits, but the cost of transit is very considerable in these cases.

The question of workable seams of coal below the Low Main seam, or what is known in Northumberland as the great Steam Coal seam, is again attracting much attention. The question, so far as East Durham is concerned, was settled to a great extent a considerable time ago, as winnings have been made at Felling, Pelton, and other collieries, and good seams have been found, and are now in course of working. In Western Durham numerous seams of coal have been worked below the Low Main for ages. But in Northumberland the case is different, as no seam has yet been worked below the great Steam Coal seam, although attempts have been made by boring and sinking at various periods to find workable seams. Lately another attempt has been made, and apparently with success. At the Pegswood Colliery, near Morpeth, a sinking has been made to a depth of 26 yards below the Low Main seam, and a good seam of coal has been found there. A boring is now in progress below the seam, for the purpose of proving, if possible, the Beaumont and other seams; and looking at the section of the strata and coal seams on the north side of the River Tyne, on the western part of this great coal field, it appears quite reasonable to suppose that this enterprise will meet with the success it deserves.—[We believe that there is one exception to this, a seam having been worked some time at Bebside, which is supposed to lie below the *Low Main*.]

For some time past the Darlington Iron Company have been boring for coal near to their works at Albert Hill and Springfield. There are no collieries now in operation in the immediate neighbourhood of Darlington, the nearest pits of any consequence being those of Shildon and Pease's West. As the Darlington Iron Company hold no mineral royalties of their own at the present time, it will be much to their advantage if they succeed in proving the existence of a good and workable seam on their own property, and within a few yards of their works. On the Elstob estate, near Bradbury, Lord Eldon has been boring for coal for a considerable time past; but difficulties of an apparently insuperable character prevented the proving of the coal. His lordship has now commenced to bore with the diamond rock drill on another part of the estate; and should his search prove successful, it will lead to the commencement of colliery operations in quite a new part of the country. Some months ago the Diamond Rock Boring Company proved the existence of an excellent seam of coal on the estate of the late Mr. Watkin, near Sedgfield, but the discovery was never followed up. As Mr. Watkin's estate is only two or three miles from Elstob, it is expected that the same seam will be found extending to the latter estate.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

June 19.—The South Staffordshire Iron Trade continues pretty much as last described, both in the pig and finished departments. The high standard of quotations still restricts business, but the ironmasters affirm that lower prices are impossible unless a previous reduction takes place in the value of fuel. Pig-iron remains at 8s. to 8s. 2s. 6d. for all-mine, and 5s. 10s. for cinder, with proportionate rates for intermediate qualities. Cold-blast iron of Shropshire make is 9s. per ton delivered in this district. There is no sign of additional furnaces likely soon to be put into operation. The finished iron trade is quiet in regard to demand, and, on the whole, quotations are steady. Bars (marked) remain at 16s. for A 1 brands, and 16s. 12s. 6d. for Earl Dudley's make. The current transactions at these rates are, however, of very moderate, and, so far as we can learn, of merely nominal extent. Second-class bars range from 13s. to 15s., according to brand. The price of sheets (singles) ranges from 17s. to 19s. for ordinary, and 20s. to 23s. for best makes. Galvanised roofing sheets are somewhat improved in demand for the colonial markets, at about late rates. Nail-sheets are a shade easier, and the cut-nail manufacturers have reduced their quotations 2s. per ton. Hoops, rods, plates, and angle iron are this week without special feature. Opinions greatly differ as to the probable course of prices on Quarter-day, an idea being prevalent that a reduction of 2s. per ton on finished iron will be declared, but this opinion is not shared by some members of long experience in the trade.

The Coal Trade remains pretty much as last reported. There is some underselling among the small colliery proprietors, but the quotations of Earl Dudley and other leading firms are very steadily maintained at the maximum standard. Forge coal ranges from 15s. to 20s. per ton, and the rate for households is in proportion. The output continues very restricted, and although the demand has so seriously declined stocks are light throughout the district. Ironstone is in steady demand, and rates remain pretty much as last reported, both for white stone and gubbin. Moxley sand, for iron-founding purposes, has advanced 3d. per ton.

Mr. Hesketh Hughes, of Birmingham, is the inventor of improvements in apparatus for rotating shafts and rods, which are likely to attract considerable attention in the engineering world. The invention relates to the employment of a divided worm, or a ring gearing, in combination with cams, fitted with suitable frame for communicating motion to shafts and rods on or to which pinions or wheels are arranged, the invention being also applicable to the screwing up nuts, bolts, or other similar appliances. A divided worm or ring gearing is arranged upon a crank or other shaft so that the sections

of the worm or ring are caused to slide to and fro by the action of cams or inclined surfaces, upon a fixed framing, to bring each section into work for rotating a pinion. The revolutions obtained by this apparatus are more expeditious than can be obtained by the ordinary solid, or complete, worm gearing. The pinion into which the sections gear may be upon a shaft, or rod, or it may have a socket or aperture to receive the heads of bolts. By this invention bevel gear can be dispensed with, and the multiplying power of spur wheels greatly diminished. Cranes, hoists, or crabs, &c., may be still further utilised by Mr. Hesketh Hughes's new apparatus. A crab, for instance, can be constructed by using a patent sectional ring, pinion geared, into one wheel, and the same speed and power obtained as are now acquired by the employment of two spur-wheels and two spur-pinions, with the great advantage of resting at any point without danger, as from the construction of the patent gearing it is impossible for the handle to fly back. A series of consecutive rolls may be arranged, driven by one shaft at all the varying speeds required to reduce a rod of iron 1 in. diameter down to ¼ in. in one operation. This novel motion may be applied to every description of machinery where gearing is requisite. In a locomotive engine, or the paddles of a steamboat, perfect rotation can be obtained by one cylinder, and the oscillations which arises from the double cranking may be entirely dispensed with by this invention.

The Iron Trade of North Staffordshire remains very quiet, and old orders are being rapidly worked off. The demand on shipping account is especially quiet. In pig-iron and ironstone hardly anything is doing. Coal is in plentiful supply, but prices are tolerably firm for the present.

The Dudley Institute of Mining Engineers had a pleasant excursion on Monday to the Nottinghamshire coal field.

The colliers employed at Messrs. Goddard's pit, near the Foley Pottery, Fenton, have had a narrow escape from the fate of the poor fellows who were drowned in the flooded pit at Pelsall. Last Friday afternoon, when a dozen men were about to descend, but when, happily, no one was in the pit, there was a rush of water from some old workings, and in a few minutes the water stood 80 yards in the shaft. The pit was known to be near disused workings, and the barrier left is shown by the inundation to have been altogether insufficient.

COAL REPORT FROM NOTTINGHAMSHIRE.

June 19.—The pretty rural village of Wollaton was on Tuesday the scene of unusual life and excitement. About 3 o'clock in the afternoon the inhabitants with others assembled to witness the ceremony of turning the first sod preparatory to sinking for a coal mine. Two of the proprietors—Mr. D. New and Mr. J. Oldknow—arrived about half-past 3 o'clock, accompanied by the hon. and Rev. J. C. Willoughby and family, Mrs. D. New and Miss A. New, Mr. and Mrs. Wright, Mr. J. Barber, Mr. Kidd, Mr. Sears (Annesley Colliery), Mr. T. Ball, and others. The hon. and Rev. J. C. Willoughby opened the proceedings by imploring the Divine blessing upon the work about to be commenced, and that it might be completed without any serious accident. Mr. D. New, who raised the first sod of No. 1 shaft, made a short and comprehensive speech on capital and labour, showing the desirability of employer and employed working harmoniously together. The party then moved to No. 2 shaft, Mr. J. Oldknow turning the first sod, after which he also made an appropriate speech. Champagne was then handed freely round amongst the visitors and bystanders. Mr. T. Ball then raised the first sod of No. 3 shaft, other sods being turned by some of the young ladies of the party. The company then adjourned to the parsonage, where they partook of tea. Bread and cheese and ale were liberally distributed amongst the villagers, Mr. Oldknow, with his accustomed liberality, promising a tea to the woman and children. The only drawback to the proceedings was the unavoidable absence of two of the proprietors, Mr. J. Reckitt and Mr. A. J. New. Mr. G. Lewis, of Derby, is the consulting engineer. The works are being carried on under the superintendence of Mr. W. Dawson.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

June 19.—There has been no change with regard to the business doing in the northern and southern parts of Derbyshire, either in lead or coal mining. In all parts of the county the Iron Trade has been actively maintained during the present month, there being still a very fair enquiry for pig, a good deal being for some of the leading establishments in Sheffield engaged in the production of heavy and other plates. Light rails are also in request, and one or two mills are kept fully going in rolling them, although in Derbyshire but few places are engaged in the business. Bessemer rails, recently added to the products of the county by the opening of the works of Messrs. Wilson and Cammell, at Dronfield, are in very brisk demand, there being large orders in hand for them that will occupy a considerable time in completing. The foundries are doing a very good business in pipes, as well as in colliery and general castings. A good seasonable trade is being done at the collieries in steam and gas coal, but the tonnage going to the metropolis from several of the leading places is scarcely equal to what it was during the month of June in last year. Smelting coal and coke are being forwarded into Northamptonshire in large quantities, as well as to the West of England. An increasing tonnage of coal is also being sent to the South from Unstone, the minerals in which district are being fast developed. Prices have not undergone much change of late, but most qualities are easier to purchase than they were a couple of months ago. The South Yorkshire Miners' Association purpose holding its annual demonstration in about six weeks, at Chesterfield, when it is expected that there will be present close upon 30,000 persons. The great difficulty appears to be with regard to the conveyance of such a number from districts not immediately connected with the Midland system.

In Sheffield and South Yorkshire the business doing in coal and iron has been moderately good. Trade, however, has not much improved recently, and there appears on the part of merchants a desire to purchase just sufficient to meet the wants of their customers and no more, believing that the present rates must be considerably reduced. The out-put, however, has not been so great during the week as usual, and in South Yorkshire we are entering upon a succession of what are termed "Feasts," which keep the miners away from work for a couple of days at least. Such was the case at Dodworth during the present week, where there are several very large collieries.

The Yorkshire examinations for colliery managers, at the Leeds Mechanics' Institution, has just been concluded, 15 out of the 29 entered having presented themselves before the examiners. The examination was conducted upon the ordinary Civil Service system, the *visa voce* portion relating chiefly to the practical working of mines. The ages of the candidates ranged from 23 (the minimum admissible) to 45, some of the older men having had long experience as underwriters. It is most desirable that the questions set should be published, in order that future candidates may know the nature of the examination they have to undergo.

Great progress is being made in the development of the minerals in the most recently discovered of the Lincolnshire ironstone fields, and it is apparent that the ore extends in an almost direct line, and branching off to the right and left from Frodingham for many miles. New furnaces are now being erected at Frodingham in addition to those at present completed or in blast. The Frodingham Iron Company have four that have been in blast from the commencement of the year, while Messrs. Dawes, in addition to three being worked for some time, have been erecting four more. The North Lincolnshire Iron Company, in the same locality, have also had two furnaces in blast during the last four or five months. There are two other companies now engaged in erecting furnaces on the estate of Mr. E. Winn, of Nostel Priory. The smelting coal and coke is principally brought from South Yorkshire, and one of the companies has recently leased a very large coal field at Cudworth, about four miles from Barnsley, and on the Midland Railway. The price paid for the coal is fully 30 per cent. more than the average for some years past. In addition to the ore raised for the use of the furnaces, a vast tonnage is sent away in all directions, a good deal going to Cleveland for mixture with the local ore. A large quantity is also being forwarded to the works of the Messrs. Dawes, at Milton and Elsecar, whilst the Parkgate Iron Company, near Rotherham, is taking a great deal from the neighbourhood of Frodingham. Furnaces in other parts of Yorkshire, as well as in Derbyshire, Staffordshire, and Wales, are also being supplied with the Lincolnshire stone. A new field is being opened out in the neighbourhood of Lincoln (where there are extensive deposits) by the Messrs. Roseby, whilst other parts of the county are about to be tapped for the ironstone, of which there is an almost unlimited supply. It is now generally understood that there was no foundation whatever for the statement that coal was

found at Epworth some 50 yards from the surface. The spot where the boring was made, only a short distance from the town, is now returned to its normal state. It is, however, believed that the coal will be found rising to the east of Doncaster, in Lincolnshire, and at a workable depth.

REPORT FROM MONMOUTH AND SOUTH WALES.

June 19.—The state of the Iron Trade continues satisfactory. There have not been many new contracts come to hand during the last few days, but a good number are on the books, and full work is pretty certain for some time. It cannot be said there is yet much improvement in the trade with the United States. Steel rails are in demand, and Dowlais, Ebbw Vale, and Landore are principally engaged on steel contracts. There has been little or no variation in prices for the last two months, makers adhering to their determination to keep up quotation, which are none too remunerative, with the cost of raw materials, fuel, and labour so high. Large quantities of pig-iron are produced in the district, but they are mainly for local use. One or two establishments are fairly occupied on bar orders, Cyfarthfa being most extensively so occupied, but, generally speaking, there is not much doing in bars. The following clearances of iron have been effected during the week:—St. Johns, 1000 tons rails; Salonia, 228 tons bars; Cronstadt, 1150 tons rails; Taganrog, 1300 tons rails; Esbjerg, 150 tons rails; Riga, 850 tons rails; Genoa, 1100 tons rails; Paysandere, 400 tons rails; New York, 1186 tons; Antwerp, 205 tons; Rio de Janeiro, 1150 tons rails; Leghorn, 715 tons rails; and Ibrail, 715 tons. In the Tin-Plate Trade the same inactivity prevails. The works in this district are, however, still in good employ.

Mr. J. Temple Wightman has resumed the management of the Blaenavon Ironworks, and not the Blaenavon Works as stated in last week's report.

The Steam Coal Trade has gradually improved of late, but not in the extent of business done. About a month ago prices began to decline, and it was apprehended by some that a reaction was setting in. Since then, however, the supply has been lessened by the irregular working of the colliers through various causes, and colliery proprietors have been able to recover nearly to the full the reductions they had previously made in quotations, and the following prices, which have just been quoted by Messrs. Tellefsen, Holst, and Wills, will compare satisfactorily with those quoted a month ago—Rhonda Merthyr smokeless steam coal, large colliery screened, 23s. 6d.; Hirwaun Upper Four-foot smokeless steam coal, 22s. 6d.; Wills's Rhonda Resolven, 22s. 6d.; No. 3 Rhonda, for smelting, domestic purposes, &c., 20s.; No. 2 Rhonda through coal (as it comes from the mine), 15s.; No. 2 through steam coal, for mining purposes, blast-engine furnaces, &c., also as it comes from the mine, 13s. 6d. In regard to prices there is no change expected for several months to come, but there are other things which may arise and cause considerable interruption to the trade. For instance, the new Mines Regulation Act will come into operation on August 1, and there will be an important question to be settled between colliers and colliery proprietors. All coals will have to be weighed, and by imperial weight only, so that the legitimate 20 cwt. will be the universal ton, and not 22 or 24 cwt. as hitherto. The question to be decided, however, is whether the colliers are to be paid the same price for cutting a 20 cwt. ton as for a 22 or 24 cwt. ton? It is likely that the men will make a determined stand for the same prices as they are getting at present, but there is no doubt that the colliery proprietors will resist it with equal determination. What the result will be of course remains to be seen.

By the unanimous desire of the Board of the Cardiff and Swansea Smokeless Steam Coal Company, Mr. John Cory, of Cardiff, and Mr. F. A. Yeo, of Swansea, have consented to accept the position of managing directors. Mr. John Davies, of Pontishead, and formerly of Newport, Monmouthshire, has been appointed secretary. Important extensions and improvements are to be immediately carried out at the Resolven and Pentrechurch Collieries, by which the output will be largely increased.

After sinking a good deal of capital and experiencing a good deal of anxiety, the Messrs. David and Sloper, proprietors of the Hendredenny Colliery, Caerphilly, have driven through the great fault, and have at last struck the valuable section of coal which lies to the west.

Perhaps the most absurd and unwarrantable strike that has ever occurred in this striking age and district is the one which has just taken place at Blaenylloch, in the Rhonda Valley. The colliers have actually refused to work for several days, because they did not like the manager, of whom they had heard a bad name before he came. The thing is so ridiculous that the men ought really to be ashamed of themselves.

Messrs. Tellefsen, Holst, and Wills, Cardiff, write—"During the month ending June 15 we have had an unusually small number of arrivals, and yet the output of coal has barely met the unusually limited demand; of course, the Whitehead holidays have materially decreased the supply, and had the demand been at all equal to the average, prices must have advanced considerably. Coke continues unaltered, most of the sellers having sold the bulk of what they will make during the present year. As to the future, we are of opinion that there will be no material change for the next three months at least, as the payment of the colliers per imperial weight, which comes into operation on August 1, is likely for some time to decrease the supply; and this will probably affect other districts more than South Wales, as the coals are weighed in South Wales, while in many districts they are measured only, but from August 1 nothing but weighing will be permitted under the new Mines Regulation Bill. In this district the men seem resolved to have the same wages for 20 cwt. as they have had hitherto for cutting 21 cwt., but the masters never will permit, and probably much time will be lost over it, and it is evident that everything that diminishes the supply helps to maintain the present high prices."

REPORT FROM LANCASHIRE AND CHESHIRE.

June 19.—Mr. Joseph Dickinson, Inspector of Mines, gave important evidence at the sitting of the coroner's inquest on Tuesday touching the deaths caused by the Brynn Hall explosion. He said that if the explosion had taken place when the pit was at ordinary work he did not think there would have been a chance for any man in the workings. In the examination he made he saw three or four 25 lb. powder-cans, two of which he thought had a considerable quantity of powder in. All were empty, some having been exploded and others having been battered in. Having 25 lb. cans was contrary to the Act of Parliament. One of the regulations was that powder was not to be taken into the mine except in cans or in canisters not containing more than 4 lbs. Not more than one of these was to be in use at one time by one man. Powder, moreover, should not have been taken into the pit except in cartridges, and the practice appears to have been to make the cartridges in the mine. The powder, however, only formed a trifling part of explosive matter in the mine. It had been chiefly fire-damp. It was an established fact that in opening out a mine like this there were so many working places going on dependent on brattice that too great risk was run, and they were at any time liable to an explosion. Mr. Peter Higson, jun., and Mr. Crippin, the manager, must have taken great care to carry on the mine as they have done without this setting in sooner. The mine was worked on what might be called the North of England system, which answered well for mines that did not give off a large quantity of gas, but he did not approve of it for a very mine of this description. The blowing out of one of the shots could not account for the wide-spread explosion that had taken place. In his opinion the workings had all become in a semi or almost explosive state, and would only need lighting up. There had been so many openings, and the air had become so weakened throughout the workings generally, that there was not air enough at the far ends to carry away the gas in the quantity in which it was made. The enquiry was further adjourned.

The clause of the Mines Regulation Act which provides for the compulsory introduction of the weighing system, in August, is attracting much attention here, where the measuring system almost wholly prevails. The Wigan Coal and Iron Company purpose to adopt Pooley's machines, and have ordered a large number of them; but many proprietors have not yet made any preparation, and some are seeking exemption. In one case this has been secured, with the consent of the men, I am told. The leaders of the men's association are bestirring themselves to induce Mr. Bruce not to grant the exemption, and are proposing to "interview" the Secretary of State upon the subject. In one portion of the district a strike on a small scale has taken place on this question.

Coal is more plentiful, and a slight reduction in price is reported. The Iron Trade is dull.

UTILISING WASTE HEAT.—The invention of Messrs. J. KNOTT and Co., Highfield Street Works, Sheffield, has for its object the utilising of the waste heat from smelting or other furnaces, but more particularly of those where a number are arranged side by side, and from which the heat passes away by vertical flues or stacks. Mr. Knott says, "The means I employ to utilize this heat, which has heretofore passed away unused, are as follows:—I arrange the steam boiler of other furnaces below the melting furnaces, either longitudinally with them or with the end transversely opposite the centre of them, and I construct flues branching from each furnace in such manner that the heat will pass under and round the water-side of the boiler, and at the same time an equal draught will be produced to each furnace. After the heat has thus passed under the boiler, it thence passes through the ordinary flue of the boiler and out by the ordinary boiler chimney. When the heat does not require to pass under the boiler, I place a damper over or into the flue, by which it passes under, and the current of heat then passes into a flue provided above the boiler and into the chimney. To convey away the heat when not required for heating the boiler in the furnaces now in use, I simply draw

out a damper, which I insert in the vertical flue of each furnace, thus allowing the heat to pass away as heretofore."

GLASGOW AND THE HIGHLANDS.

ROYAL ROUTE, VIA CRINAN AND CALEDONIAN CANALS, by Royal Mail steamer IONA, from BRIDGE WHARF, GLASGOW, at 7 A.M., and from GREENOCK at 9 A.M., conveying passengers daily for OBAN, FORT WILLIAM, and INVERNESS. For sailings to GAILLOCH, ROSS SHIRE (for Loch Maree), STAFFA, IONA, GLENCOE, MULL, SKYE, LEWIS, and WEST HIGHLANDS, see bills, with map and tourist fares, free by post on application to DAVID HUTCHESON and Co., 119, Hope-street, Glasgow.

MINING AND COLLIERY PLANT.

MESSRS. MASON, SONS, AND KNIGHT, 18, NEW BRIDGE STREET, BLACKFRIARS, E.C., have FOR SALE LOCOMOTIVES, WAGONS, RAILS, and every description of COLLIERY and MINING MACHINERY.—Information at their offices as above.

PEAT.

AN EXTENSIVE TRACT of PEAT LAND in ENGLAND TO BE DISPOSED OF. Apply to Messrs. CLARK, ELLIOTT, and STEELE, Solicitors, 9, Cook's-court, Lincoln's Inn.

MANGANESE MINE.

FOR DISPOSAL, on very moderate terms, a PROPERTY situated in NORTH WALES, which has already yielded large quantities of the best description of this mineral. VALUABLE HEMATITE IRON ORE has also been found upon the property. Address, "Manganese," care of Mr. Thomas, stationer, New London-street, E.C.

LEAD AND BARYTES MINE.

FOR DISPOSAL, BY PRIVATE TREATY, one of the MOST EXTENSIVE BARYTES MINES in SHROPSHIRE. The mines, with but very little work and attention, have for years past yielded, and are now yielding, a good and steady profit, and almost any quantity of barytes can be regularly obtained. It is affirmed by reliable authorities that the many lodes must in depth prove to be as rich, if not richer, than any of the most celebrated lead veins in the Shropshire district. Lead can be at once returned.

The undertaking would be of considerable magnitude, and would form a most exceptional and valuable subject for a public company. The reason for the disposal of these mines, which may be absolutely termed real property, will be found eminently satisfactory. Gentlemen of capital only are requested to reply. Address, "J. P.," care of Mr. Thomas, Stationer, New London-street, E.C.

MINERAL ESTATE IN WALES, comprising about FOURTEEN HUNDRED ACRES. Apply to Captain EVANS, Machynlleth.

REQUIRED, in a Mining Office, in Yorkshire, AN AGENT, who can DIAL and SURVEY correctly, is quick at accounts, a good draughtsman, and has a general knowledge of metalliferous mining. Address, with certificate of character and ability, and state salary required, to Mr. EDDY, Skipton, Yorkshire.

A DRAUGHTSMAN (German), educated as an ENGINEER, desires a SITUATION. First-class testimonials from previous employers. Address, "A. C.," 123, Gower street, W.C., London.

PENSTRUTHAL CONSOLS MINES.

WANTED, a STAMPING ENGINE not less than 26 in. cylinder, with STAMPS AXLES, &c. Particulars to be sent at once to MATTHEW GREENE, 84, Gresham House, Old Broad-street, London.

WANTED, for a LARGE IRONWORKS in YORKSHIRE, an ASSISTANT MANAGER. To a gentleman of great experience a liberal salary will be given. Apply, "Iron," MINING JOURNAL Office, 26, Fleet-street, London.

WANTED, by a Gentleman largely connected with the METAL TRADE in MANCHESTER, a first-class TIN-PLATE AGENCY, can command a good and safe connexion, both for home and export, through Lancashire and Yorkshire. Highest testimonials. Address, in first instance, "O. G.," General Post Office, Manchester.

WANTED, by a RAIL INSPECTOR, an ENGAGEMENT.—Twenty years' experience. First-class testimonials. Address, Mr. THOMAS MORRIS, Gwent-street, Pontypool, Mon.

WANTED, COUNTRY AGENCIES.—A CITY FIRM IS OPEN TO TRANSACT, as Agents in London, the BUSINESS of FIRST-CLASS MANUFACTURING FIRMS in the COUNTRY in connection with the STEEL, IRON, and METAL TRADES, &c. Address, "Iron," at Mr. Barnard Morris, Advertising Agent, 43, Ludgate-hill, London, E.C.

WANTED, by the Advertiser (who has recently returned from Spain) a SITUATION as MINE CAPTAIN, at HOME or ABROAD. Has had several years' experience in zinc mines, and has a practical knowledge of the Italian and Spanish languages. Good references and testimonials. Address, "W. H. J.," Post Office, Winscombe, near Weston-super-Mare.

WANTED, a 30 in. or 36 in. ROTARY ENGINE, with BOILERS complete, and 48 to 50 heads of STAMPS, all in thoroughly good condition, for the ST. STEPHEN'S TIN AND COPPER MINES. Apply, with particulars and price, to Mr. Wm. WARD, Secretary, Crosby House, 95, Bishopsgate-street Within, London, E.C.

WANTED, a QUARTZ CRUSHING MACHINE, in good condition.—Address to H. D. POCHIN and Co., Willington Quay Chemical Works, Newcastle-on-Tyne.

WANTED, a GOOD SECONDHAND WATER-WHEEL, about 30 ft. by 3 ft. breast. Full particulars, with price, and where to be seen, to be sent to Capt. P. RICH, St. Blazey Consols Tin Mine, St. Blazey, Cornwall; or to the undersigned. 62, Cornhill, London, E.C. G. S. CAUTER, Secretary.

WATER-WHEEL WANTED, from 27 ft. to 35 ft. in diameter, and from 3 ft. to 4½ ft. broad. Particulars and price to be sent to Mr. J. F. NEVIN, Manager, Lead Hills, Lanarkshire, Scotland.

NEW HORIZONTAL ENGINE, 12 in. cylinder, 30 in. stroke, with slot link motion, for winding, pump, fly wheel, or drums. Apply, Mr. JOHN MOORE, 40, Lloyd-street, Manchester.

BLAKE'S STONE-BREAKER, size at top of jaws 12 in. by 5 in., in good condition. New last year. Price £55, cash. May be inspected at 93, Charles Henry-street, Birmingham.

ON SALE, SIXTY FATHOMS second-hand 12 in. PUMP TREES, about 20 tons, as good as new, in lots to suit purchasers. Would make first-class water-pipes, each one having been tested. WILL BE SOLD CHEAP. Apply to Mr. JAMES McILQUHAM, Machine Broker, Aberystwyth.

ON SALE, nearly new, MURRAY'S BRICK-MAKING MACHINE, with patent die and self feeding cutting table. Apply, Mr. JOHN MOORE, 40, Lloyd-street, Manchester.

FOR SALE, TWO FANS, suitable for exhausting hot gases or blowing. Schiele's patent of 1863, largest size. In good condition. Apply to the BEDE METAL AND CHEMICAL COMPANY (Limited), Jarrow-on-Tyne.

FOR SALE, a GOOD SECOND-HAND 60 in. cylinder PUMP ENGINE, in good condition, 10 ft. stroke in cylinder and 8 ft. in shaft. Price, &c., on application to FRANCIS DINGEY, Truro Foundry, Truro, Cornwall.

TO CAPITALISTS.—A BONA FIDE INVESTMENT. A FIRST-CLASS SLATE QUARRY, in NORTH WALES, TO BE DISPOSED OF.—It is in full working order, with ample PLANT, MACHINERY, &c. The present proprietors not having the necessary capital to fully develop the property, it is now for sale at a reasonable price. All information will be afforded, and facilities given to inspect the Quarry, on application to "Alpha," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

TO PROMOTERS OF PUBLIC COMPANIES, &c. THE ADVERTISER has a LARGE NUMBER of ADDRESSED WRAPPERS FOR SALE, copied from Lists of Shareholders in Railways, Mines, &c., &c., and have all been checked, so that there is no possibility of two or more going to the same address. Apply to "J. H.," 10, Boundary-road, Camberwell-gate, S.E.

THE ADVERTISERS, having agreed to PURCHASE a PAYING COLLIERY in SOUTH WALES, on very favourable terms, wish a few GENTLEMEN to JOIN THEM. They propose to form a private company, partly in shares, partly debentures, each of which will pay a very large interest. Address, "Colliery," care of Davies and Co., Advertising Agents, Finch-lane, Cornhill.

THE BAMPFYLDE (COPPER AND IRON) MINE "is out of the category of a speculation; large dividends are certain. At 24 lbs., at which they are offered you, it is not selling, but really giving the shares away; they are intrinsically worth four times the money. There is a strong disposition in the market to put them to £5 per share." OFFERS WANTED for 40 BAMPFYLDE; 20 EAST LLANGYNOG; and 25 FRANCO CONSOLS. Address, Mr. H. CROFTS, 24, Old Cavendish-street, W.

NORTH LONDON RAILWAY COMPANY.

THE DIRECTORS of the NORTH LONDON RAILWAY COMPANY are prepared to RECEIVE TENDERS for the SUPPLY of THIRTY THOUSAND TONS, or any lesser quantity, of STEAM COAL, suitable for locomotive purposes, the deliveries to be extended over a period of twelve months, or thereabouts, commencing on or about the 1st of August next. Particulars of the terms and conditions of tender can be obtained on application to the Locomotive Superintendent, at the Company's Works, Bow-road, London, E. Tenders to be sent in before Twelve o'clock on Tuesday, the 1st of July next, addressed to the Secretary, at the offices of the company, Euston Station, London, N.W., marked outside "Tender for Locomotive Coal." The directors do not bind themselves to accept the lowest or any tender. By order, ROBERT S. MANSSELL, Secretary. Euston Station, London, N.W., June 16, 1873.

NORTH LONDON RAILWAY COMPANY.

THE DIRECTORS of the NORTH LONDON RAILWAY COMPANY are prepared to RECEIVE TENDERS for the SUPPLY of SIX HUNDRED TONS of HOUSE COAL, the deliveries to be extended over a period of twelve months, or thereabouts, commencing on or about the 1st of August next. Particulars of the terms and conditions of tender can be obtained on application to the Locomotive Superintendent, at the Company's Works, Bow-road, London, E. Tenders to be sent in before Twelve o'clock on Tuesday, the 1st of July next, addressed to the Secretary, at the offices of the company, Euston Station, London, N.W., marked outside "Tender for House Coal." The directors do not bind themselves to accept the lowest or any tender. By order, ROBERT S. MANSSELL, Secretary. Euston Station, London, N.W., June 16, 1873.

TENDERS FOR GAS COAL.

THE DIRECTORS of the SHREWSBURY GAS LIGHT COMPANY are prepared to receive TENDERS for the SUPPLY of SIX THOUSAND TONS of the best description of GAS COALS for the period of twelve months, ending June 30, 1874. Such coals to be as free as possible from sulphur, bats, bind, refuse, and dirt, and shall be weighed upon the company's machine (2240 lbs. to the ton), and delivered free by rail at the expense of the contractor upon the Gas Company's premises, Castle, Foregate. Tenders, specifying the coals, and the pits at which they are to be raised, must be delivered on or before the 2nd of July next. S. B. DARWIN, Secretary. June 9, 1873.

DELAWARE AND HUDSON CANAL COMPANY SIX PER CENT. DEBENTURES OF 1875.

NOTICE IS HEREBY GIVEN, that the COUPON, due 1st July next, on the LOAN of £900,000 issued through Messrs. Gilead A. Smith and Co., will be PAID by the Imperial Bank (Limited), 6, Lombury, on and after that date. Coupons must be left one clear day for examination.

CLOSING OF THE SHARE LIST.

THE SHARE LIST of the POST OFFICE QUARTZ GOLD MINING COMPANY (Limited), Elaine, near Ballarat—a dividend payable on Saturday, June 28th inst.—IS OPENED THIS DAY, and will CLOSE on Saturday, June 28th inst. Prospectuses, &c., at 4, Royal Exchange-avenue, London, E.C. June 18, 1873.

PRINCE PATRICK LEAD MINING COMPANY (LIMITED). The Directors have THIS DAY DECLARED the SECOND DIVIDEND at the rate of TWENTY PER CENT. PER ANNUM (free of income tax), which will be PAID on the 15th July next. By order, THOMAS HUGHES, Secretary. 59, Seel street, Liverpool, 18th June, 1873.

NERBUDDA COAL AND IRON COMPANY (LIMITED). Notice is hereby given, that the THIRTEENTH ORDINARY GENERAL MEETING of the company will be HELD at the London Tavern, Bishopsgate-street, in the City of London, on THURSDAY, the 3rd day of July, 1873, at Twelve o'clock noon, for the transaction of the business of the company, including the election of directors and auditors. The Transfer Books will be closed from the 28th instant to the 3rd July, 1873, both days inclusive. By order of the Board, FREDK. R. BLUETT, Secretary. 18, Coleman-street, 18th June, 1873.

COLORADO TERRIBLE LODGE MINING COMPANY (LIMITED). The FOURTH ORDINARY GENERAL MEETING of the members of the company will be HELD at the City Terminus Hotel, Cannon-street, on WEDNESDAY, 25th June next, at Two P.M., to receive and consider the accounts for the year ended 31st March last, and to transact the ordinary business of the company. F. ANDREWS, Secretary. 21, Great Winchester-street, E.C., June 13, 1873.

THE MAUGHOLD-HEAD MINING COMPANY (LIMITED). NOW SHIPPING HEMATITE IRON ORE, of the best quality, at a profit of 41 per cent. Extent of mining sets, 955 acres. Dyrhane Lodes, analysed by Fred. Clauet, Esq., Assayer to the Bank of England;—"Percentage of metallic iron, 62.00. This ore is of very good quality, and resembles in composition the red hematite of Cumberland." Ballajorra Lodes, analysed by Henry M. Noad, Ph.D., F.R.S.:—"Iron, per cent, 61.34. An iron ore of first-rate excellence." The prospectus, plans, and reports sent free. THE SHARE LIST WILL SHORTLY CLOSE. Registered Office, 30, John-street, Bedford-row, W.C.

COLONIAL BANK.—Subscribed capital £2,000,000. Paid up capital 600,000. Reserve fund 70,000.

The Court of Directors of the Colonial Bank hereby give notice that, in pursuance of the provisions of the Charter, a HALF-YEARLY GENERAL MEETING of proprietors will be HELD at the London Tavern, Bishopsgate-street Within, on THURSDAY, the 3rd July, at Two o'clock precisely, to receive the report of the preceding year of the Corporation, and to transact the business of the company. The Transfer Books of the Corporation will be closed on the 23rd June, and opened on the 14th July next. By order of the Court of Directors, JAMES CLARK, Secretary. 13, Bishopsgate-street Within, 5th June, 1873.

THE CAPE COPPER MINING COMPANY (LIMITED). Notice is hereby given, that the ORDINARY GENERAL MEETING of the company will be HELD at the Terminus Hotel, Cannon-street, in the City of London, on WEDNESDAY, the 9th day of July, at Two o'clock in the afternoon, to receive the report and accounts of the year 1872, and for general purposes. In conformity with the Articles of Association, two directors—viz., William Bates, Esq., and Edward A. Pontifex, Esq.—retire from office at the above-named meeting, but, being eligible, offer themselves for re-election. The directors have, in accordance with the powers vested in them under the 36th clause of the Articles of Association, re-appointed John Wild, Esq., as a director, on his return from Namagaland. This appointment will be submitted to the shareholders for confirmation at the above-named meeting. The general meeting will have to elect two auditors for the current year, and F. W. Colcland, Esq., and Robert Fletcher, Esq., being eligible, offer themselves for re-election. The Transfer Books will be closed from the 25th day of June, to the 9th day of July, both days inclusive. By order of the Board, J. C. LEAVER, Secretary. 6, Queen-street-place, London, E.C., 18th June, 1873.

THE VAN CONSOLS LEAD AND BARYTES MINING COMPANY (LIMITED). Notice is hereby given, that an ORDINARY GENERAL MEETING of the shareholders in this company will be HELD on the mine, near Llanidloes, Montgomeryshire, on WEDNESDAY, the 2nd day of July, 1873, at One o'clock P.M. By order of the Board, MATTHEW GREENE, Secretary. Offices: 83, 84, and 85, Gresham House, Old Broad-street, London, 18th June, 1873. The mines are distant 3 miles from the railway station at Llanidloes, which has direct railway communication with London and Liverpool, via Shrewsbury.

THE GREAT WEST VAN LEAD MINING COMPANY (LIMITED). Notice is hereby given, that an ORDINARY GENERAL MEETING of the shareholders in the Great West Van Lead Mining Company (Limited) will be HELD on the mine, near Pontnewydd, Cardiganshire, on TUESDAY, the 1st July, 1873, at One o'clock P.M., to comply with the requirement of the Companies Act, 1867. By order of the Board, MATTHEW GREENE, Secretary. 83 to 85, Gresham House, Old Broad-street, London, 18th June, 1873. The mine is situated about 2 miles from Pontnewydd, and can be easily reached from Aberystwyth or Llanidloes, being some 2½ hours' drive from the latter town, which are both in direct railway communication with London and Liverpool.

DIAMOND FUEL COMPANY (LIMITED).

FOR PRODUCING SOLID FUEL FROM COAL OR COKE DUST. This company are now GRANTING LICENSES for the USE of their PATENT in the United Kingdom. By being able to dispense with the costly processes employed in the manufacture of existing patent fuels, and producing an article free from their defects, this company believe their fuel, when generally known, must supersede all other patent fuels. By its employment the owners of anthracite collieries may utilize the coke which has hitherto been wasted. The proprietors of gasworks may by its use bind together and use over again their coke breeze. Application to be made to the Secretary, at the office of the company, 25, Old Broad-street, City, E.C.

MR. J. S. MERRIS, ASSAYER AND ANALYTICAL CHEMIST, SWANSEA.

HORIZONTAL ENGINES, of most approved construction, from 8 to 60 in. cylinder, for WINDING AND GENERAL PURPOSES. Some good secondhand HORIZONTAL ENGINES ON SALE, single and in pairs, from 14 inches to 20 inches cylinders, suitable for winding, &c. GOOD BOILERS of all sizes.

ARRISS AND CO. 29, CONGREVE STREET, BIRMINGHAM.



PARIS.



ORDER OF THE CROWN OF PRUSSIA.

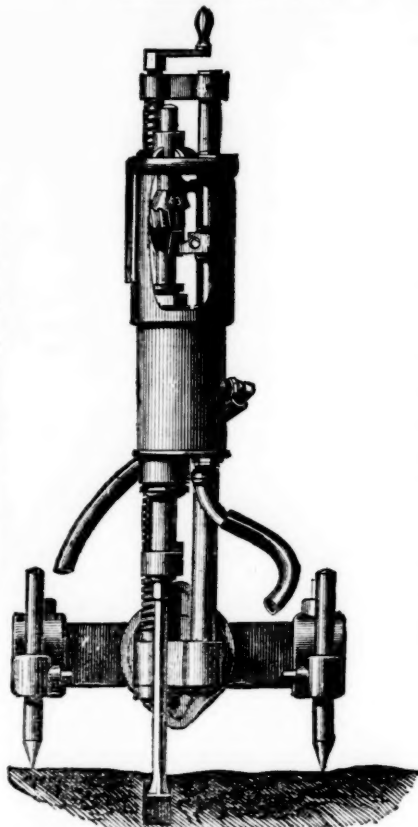


FALMOUTH.

McKEAN'S ROCK DRILL,

FOR MINES, TUNNELS, QUARRIES, AND SUBMARINE WORK
500 TO 1000 STROKES PER MINUTE
(counted by mechanism).

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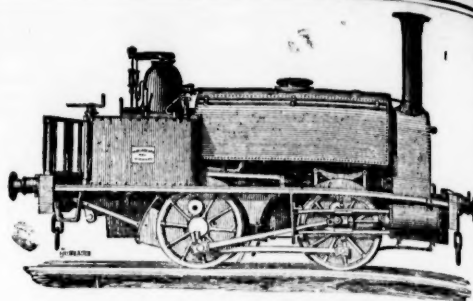
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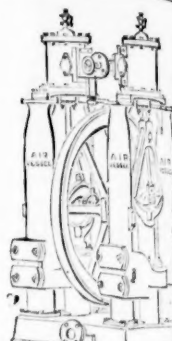
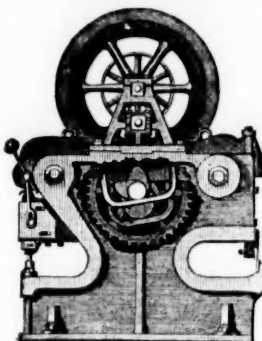
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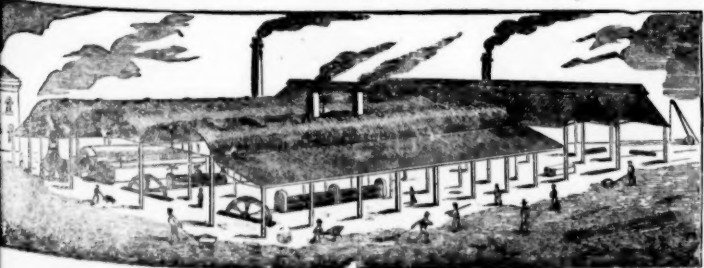
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NON-DIVIDEND MINES

337	South Wheal Grofty, <i>c</i> , Illogan	2 10
496	South Wh. Frances, <i>c</i> , Illogan	35 10
6000	South Wheal Kitty, <i>t</i> , St. Agnes	29 3
4000	St. Agnes Consols, <i>t</i> *	0 50
512	St. Aubyn United, <i>c</i> , Gwennap	3 10
14000	St. Blazey <i>t</i> , (42 10s. shares)	1 00
62000	St. Breward Consols, <i>c</i> , <i>s</i> , Cornwall	1 00
20000	St. Dennis Consols, <i>t</i> , St. Dennis	1 00
4000	St. Jean Consols, <i>t</i> , Flintshire	1 00
12000	Tamar Consols, <i>t</i> , Liffa, Devon	2 00
3879	Tamar Valley, <i>s</i> , <i>t</i> , Beerstock	1 00
4000	Teign Valley, <i>t</i> , <i>barr</i> , Bridford	1 78
3500	Tin Hill, <i>t</i> , St. Stephens	1 00
3528	Tin Valley, St. Neot	1 13
1200	Tinnack West Trumpet, <i>t</i> , Sithney	10 00
5000	Treleigh Wood, <i>t</i> , Redruth	2 13
1024	Treleigh Wood United, <i>t</i> , Redruth	1 00
547	Trevelan Consols, <i>t</i> , Liffa	12 00
12000	Trechellan, <i>s</i> , <i>t</i> , Crantock	2 00
7500	Tresellyn, <i>t</i> , Altarnun	2 10
15000	Tretolai, <i>t</i> , <i>t</i> , Bodmin	2 00
1343	Trevack, <i>t</i> , <i>s</i> , Uye Yelant	4 28
200	Tucker's Downs, Camborne	1 00
12000	Tyllwyd, <i>s</i> , <i>t</i> , Cardigan	1 00
6000	Unity Wood, <i>t</i> , <i>c</i> , Kenwyn	2 00
15000	Van Consols, <i>t</i> , Llanidloes	2 10
1000	Vandegrove, <i>t</i> , <i>c</i> , Llanidloes	7 00
20000	Victoria, <i>t</i> , <i>c</i> , Llanabuloe	1 00
25000	Vron United, <i>s</i> , <i>t</i> , Flintshire	1 00
30000	Welsh, <i>t</i> , Cardigan	1 00
6000	West Bassett, <i>c</i> , Illogan	1 00
110592	West Caradon, <i>c</i> , St. Cleer	1 18
100	West Cudrurrow, <i>t</i> , <i>c</i> , Camborne	5 00
12800	West Drakewells, <i>c</i> , Calstock	0 14
100000	W. Esqair Lie, <i>t</i> , Card <i>s</i> (1000 reserve)	2 00
5000	West Golphin, <i>t</i> , <i>c</i> , Breage	1 60
12000	West Goggin, <i>t</i> , Flintshire	2 00
5164	West Great Work, <i>t</i> , Breage	3 18
1000	W. Gwennap Consols, <i>t</i> , <i>c</i> , Gwennap	1 00
8750	West Jewell, <i>t</i> , Gwennap	2 00
10000	West Llangynog, <i>s</i> , <i>t</i> , Montgomery	2 00
12000	West Maria & Fortescue, <i>t</i> , <i>c</i> , Lamer	4 40
50000	West Milw, <i>s</i> , <i>t</i> , Flint	1 00
12000	West Pant-y-Go, <i>s</i> , <i>t</i> , Flint	1 00
3000	West Phoenix, <i>t</i> , Linkinhorne	0 13
12000	West Polk, <i>t</i> , St. Agnes	3 00
5000	West Stipston, <i>t</i> , <i>c</i> , Salsburgh	1 00
12000	West Tankerville, <i>t</i> , Salsop	3 00
512	West Tolgus, <i>c</i> , Redruth	53 00
20000	West Wheal Lucy, <i>t</i> , <i>c</i> , Lelant	1 80
6000	West Wheal Gorland, <i>t</i> , <i>c</i>	3 00
400	West Wheal Seton, <i>c</i> , Camborne	54 15
6000	Wheal Agar, <i>c</i> , Illogan	9 12
6000	Wheal Argus, <i>t</i> , Saneered	0 10
741	Wheal Bagin and Grylls, <i>t</i>	9 13
512	Wheal Buller, <i>t</i> , Redruth	62 60
6000	Wheal Coates, <i>t</i> , St. Agnes	2 00
5193	Wheal Crebor, <i>c</i> , Tavistock	3 68
8000	Wheal Emma, <i>t</i> , <i>c</i> , Buckfastleigh	1 50
5120	Wheal Gribbler, <i>c</i> , <i>t</i> , Redruth	0 70
12000	Wheal Jewell, <i>c</i> , Marazion	1 10
5000	Wheal Lucy, <i>t</i> , Phillack	1 70
12000	Wh. Mary Hatchings, <i>t</i> , Plympton	0 10
1000	Wheal Osborne, <i>t</i> , Crowan	3 00
3000	Wheal Park, <i>t</i> , Redruth	2 10
5000	Wheal Rome, <i>t</i> , <i>c</i> , Camborne	0 28
10000	Wheal Ruby, <i>t</i> , Ludgvan	1 00
4568	Wheal Sparrow, <i>t</i> , Redruth	1 00
1000	Wheal Speedwell, <i>t</i> , <i>c</i> , Breage	4 00
4066	Wheal Viny, <i>t</i> , <i>c</i> , Redruth	11 20
6000	Wheal Vincent, <i>t</i> , Altarnun	1 74
8000	White Works, <i>t</i> , Dartmoor	5 00
12000	Willoughby, <i>t</i> , Llanrwst	2 10
100000	Wood Close & Polgooth, <i>t</i> , St. Mew	2 10
1200	Zennor, <i>t</i> , Cornwall	5 00

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5	Fairbairn Engineering	5 0s. 0s.
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10	Glasgow Port Washington Co. [L.]	1 10s. 0d.
2	Gwyns-willim Colliery Co. [L.]	0 10s. 0d.
15	Hopkins, Gilkes, and Co. [L.]	10 0s. 1d.
10	Ifton Iron Colliery Co. [L.]	2 10s. 0d.
10	Ince Rolling Mills [L.]	8 0s. 0s.
10	John Bagnall and Sons [L.]	4 0s. 0s.
5	Littledean Woodside Col. Co. [L.]	5 0s. 0s.
50	Llynvi, Ogmore, & Tondur Co. [L.]	42 0s. 4d.
10	Lynedy and Wappol Iron Ore [L.]	6 0s. 1d.
10	Marbella Iron Ore Co. [L.]	10 0s. 0d.
10	Merry and Cuninghame [L.]	3 10s. 0d.

MISCELLANEOUS.

5	Mold Argued Colliery Co. [L.]	5	0 0.
10	Monkland Iron and Coal Co. [L.]	10	0 0. 1
10	Midland Iron Co. [L.]	5	0 0. 10
4	Mwyndy Iron Ore [L.]	3	10 0. 5
100	Nant-y-Glo and Blaonia (8 p.c. pref.)	100	0 0. 1
10	Native Iron Ore [L.]	4	0 0.
10	Neapend Rolling Mills [L.]	3	0 0. 1
1	Nerbudda Coal and Iron	1	0 0. 1
	No. of Iraving Iron Company [L.]	3	0 0. 1
10	Northampton Coal, Iron & Wagon [L.]	3	0 0. 1
10	Northfield Iron Co. [L.]	6	0 0.
35	Palmer's Shipbuilding and Iron [L.]	25	0 0. 1
100	Parkgate Iron Co. [L.]	65	0 0. 1
20	Patent Shaft and Axletree [L.]	10	0 0. 1
5	Phoenix Bessemer Co. [L.]	30	0 0. 1
50	Rhymney Iron Co. [L.]	50	0 0. 1
100	Sandwell Park Colliery Co. [L.]	50	0 0. 1
50	Shotts Iron Co. [L.]	50	0 0. 1
100	Sheepferrig Iron and Coal [L.]	65	0 0. 1
1	Shelford Forge and Rolling Mill [L.]	2	0 0. 1
5	Silkestone Fall Colliery Co. [L.]	4	0 0.
	Skerne Ironworks [L.]	15	0 0. 1
100	Staveley Iron and Coal Co. [L.]	80	0 0. 1
100	Ditto ditto New	10	0 0.
10	Stranton Iron and Steel Co. [L.]	7	0 0.
20	South Cleveland Ironworks [L.]	20	0 0.
100	Thames Iron Company	100	0 0.
75	Titanic Iron and Steel	5	0 0.
50	Ulverston Mining Co. [L.]	50	0 0.
10	Vancouver Coal [L.]	6	0 0.
100	Vickers, Sons, and Co. [L.]	100	0 0.
50	Welsh Ironworks Co. [L.]	50	0 0.
25	W. Cumberland I. and Steel [L.]	5	0 0. 1
5	West Swansea Colliery Co. [L.]	3	0 0.
10	Whitehaven Iron Co. (L.)	70	0 0. 1
100	Wigan and Whiston Coal Co. [L.]	75	0 0. 1
100	Wigan Coal and Iron Co. [L.]	75	0 0. 1

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10	Anglo-Mexican Mint	10	0 0. 1
25	Canada Company	25	0 0. 1
25	Copper Miners of Eng. (7 p.c. pref.)	25	0 0. 1
10	Huntingdon Copper and Sul. Co.	9	0 0. 1
5	Patent Gunpowder	8	0 0. 1
10	Slith Light (ord. sh.)	10	0 0. 1
10	Tharshi Sulphur and Copper Co.	8	0 0. 1
10	Young's Paraffin Light	8	10 0. 1

5, blende; c, coal; g, silver; g, gold; l, lead; a, silver; s, silver; c, copper; l, tin; z, zinc.

* Limited Liability Companies; † quoted on the Stock Exchange.

† have paid dividends.

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b, blende; *cl*, coal; *c*, copper; *g*, gold; *l*, lead; *s*, silver;
sl, silver-lead; *t*, tin; *z*, zinc.
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